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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

Before the Atomic Safety and Licensing Board

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

APPLICANT'S ANSWER TO
PETITIONERS' CONTENTIONS

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APPLICANT'S ANSWER TO
PETITIONERS' CONTENTIONS

I. INTRODUCTION

In its September 23, 1997 Initial Prehearing Order, as modified by the October 17, 1997 Memorandum and Order (Ruling on Motions to Suspend Proceeding and for Extension of Time to File Contributions) and the December 18, 1997 Order (Granting Motion for Extension of Time to File Responses to Contentions and Supplemental Petitions), the Atomic Safety and Licensing Board ("Licensing Board") pursuant to 10 C.F.R. § 2.714(b) required that all petitioners file supplements to their hearing petitions/intervention requests, which must include a list of contentions and supporting bases, and that answers to these supplements be submitted by December 24, 1997.

Contentions have been filed by all Petitioners, i.e. the Skull Valley Band of Goshute Indians ("Skull Valley Band" or "Band"); the State of Utah ("State"); Castle Rock Land & Livestock, L.C., Skull Valley Co., Ltd., and Ensign Ranches of Utah, L.C.

(collectively "Castle Rock"); Ohngo Gaudadeh Devia ("OGD"); and Confederated Tribes of the Goshute Reservation and David Pete (collectively "Confederated Tribes"). Applicant Private Fuel Storage L.L.C. ("Applicant" or "PFS") submits the following answers to each petitioner's contentions. Prior to discussing each of the petitioners' contentions, Applicant sets forth its statement of law on the standards for admission of contentions. For the reasons set forth with respect to each of the contentions, Applicant respectfully submits that the contentions be admitted, admitted in part, or denied as appropriate.

II. STANDARDS FOR ADMISSIBILITY AND SCOPE OF CONTENTIONS

A. Overview Of Admissibility Requirements

The Commission's Rules of Practice at 10 C.F.R. § 2.714 set forth the requirements for the admission of contentions. In addition to demonstrating the required interest, a petitioner must submit at least one valid contention that meets the requirements of 10 C.F.R. § 2.714 in order to be permitted to participate in a licensing proceeding as a party. 10 C.F.R. § 2.714(b)(1); Yankee Atomic Electric Company (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 248 (1996); Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 117 (1995).

For a contention to be admitted, it must meet the standards set forth in 10 C.F.R. § 2.714(b)(2), which provide that "[e]ach contention must consist of"

- "a specific statement of the issue of law or fact to be raised or controverted", accompanied by
- (i) a "brief explanation of the bases of the contention";

- (ii) a "concise statement of the alleged facts or expert opinion" supporting the contention together with references to "specific sources and documents . . . on which the petitioner intends to rely to establish those facts or expert opinion"; and
- (iii) "[s]ufficient information . . . to show that a genuine dispute exists with the applicant on a material issue of law or fact," which showing must include "references to the specific portions of the application . . . that the petitioner disputes and the supporting reasons for each dispute . . . ."

10 C.F.R. § 2.714(b)(2). The failure of a contention to comply with any one of these requirements is grounds for dismissing the contention. 10 C.F.R. § 2.714(d)(2)(i); Arizona Public Service Company (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155-56 (1991); Sequoyah Fuels Corporation and General Atomics, LBP-94-8, 39 NRC 116, 117-18, aff'd on other grounds, CLI-94-12, 40 NRC 64 (1994). Further, a contention must also be dismissed where the "contention, if proven, would be of no consequence . . . because it would not entitle [the] petitioner to relief." 10 C.F.R. § 2.714(d)(2)(ii); Yankee Atomic Electric Company (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61, 78, aff'd. CLI-96-7, 43 NRC 235 (1996); Long Island Lighting Company (Shoreham Nuclear Power Station, Unit 1), LBP-91-39, 34 NRC 273, 280-81 (1991).

The above standards governing the admissibility of contentions are the results of a 1989 amendment to 10 C.F.R. § 2.714. This amendment was intended "to raise the threshold for admission of contentions." 54 Fed. Reg. 33,168 (Aug. 11, 1989) ("Rules of Practice for Domestic Licensing Proceedings -- Procedural Changes in the Hearing Process"); see also Palo Verde, supra, CLI-91-12, 34 NRC at 155-56; Long Island Lighting Company (Shoreham Nuclear Power Station, Unit 1), LBP-91-35, 34 NRC 163,

167 (1991). The requirements of the new rule are to be enforced rigorously: "[i]f any one . . . is not met, a contention must be rejected." Palo Verde, supra, CLI-91-12, 34 NRC at 155; see also Shoreham, supra, LBP-91-39, 34 NRC at 279. A licensing board is not to overlook a deficiency in a contention or assume the existence of missing information. Id.

B. General Limitations On The Admissibility Of Contentions

"[C]ontentions play a vital role in [NRC] licensing adjudications by framing the issues for consideration." Yankee Atomic Electric Company (Yankee Nuclear Power Station), LBP-96-15, 44 NRC 8, 21 (1996). Accordingly, a contention and its basis must be carefully scrutinized to determine if a specific, litigable issue has been pleaded. Such scrutiny is necessary, among other things, to "assure at the pleading stage that the hearing process is not improperly invoked" and "that the proposed issues are proper for adjudication in the particular proceeding." Philadelphia Electric Company (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 A.E.C. 13, 20-21, aff'd in part on other grounds, CLI-74-32, 8 A.E.C. 217 (1974) (footnotes omitted). Thus, the specific issues of law or fact raised or controverted by a contention must be proper for adjudication in the proceeding at hand in order for the contention to be admitted.

Commission regulations and precedent establish several general limitations on the scope of issues that may properly be raised and litigated in a licensing proceeding. First, it is well established that "a licensing proceeding . . . is plainly not the proper forum for an attack on applicable statutory requirements or for challenges to the basic structure of the Commission's regulatory process." Peach Bottom, supra, ALAB-216, 8 A.E.C. at

20. Thus, a contention which collaterally attacks a Commission rule or regulation is not appropriate for litigation and must be rejected. 10 C.F.R. § 2.758; Potomac Electric Power Company (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-218, 8 A.E.C. 79, 89 (1974). Similarly, "licensing boards should not accept in individual license proceedings contentions which are (or are about to become) the subject of general rulemaking by the Commission." Id. at 85.[1] This policy avoids wasteful duplication of effort (id.) and also avoids regulatory inconsistency. In the same vein, Commission policy statements and policy declarations are binding on licensing boards and are not subject to challenge in licensing proceedings.[2]

Thus, for example, a contention which "advocate[s] stricter requirements than those imposed by the regulations" is "an impermissible collateral attack on the Commission's rules" and must be rejected. Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), LBP-82-106, 16 NRC 1649, 1656 (1982); see also Arizona Public Service Company (Palo Verde Nuclear Generating Station, Units 1, 2, & 3), LBP-91-19, 33 NRC 397, 410, aff'd in part and rev'd in part on other grounds, CLI-91-12, 34 NRC 149 (1991). Likewise, a contention that seeks to litigate a generic determination established by Commission rulemaking is "barred as a matter of law."

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[1] Accord Duke Power Company (Catawba Nuclear Station, Units 1 and 2), ALAB-813, 22 NRC 59, 85-86 (1985).

[2] Mississippi Power & Light Company (Grand Gulf Nuclear Station, Units 1 and 2), ALAB-704, 16 NRC 1725, 1731-32 and n.9 (1982); Public Service Company of Oklahoma (Black Fox Station, Units 1 and 2), ALAB-573, 10 NRC 775, 791 (1979), vacated in part and remanded on other grounds, CLI-80-8, 11 NRC 933, rev'd in part on other grounds, CLI-80-31 (1980); Northern States Power Company (Prairie Island Nuclear Generating Plant, Units 1 and 2), ALAB-455, 7 NRC 41, 51 (1978), remanded on other grounds sub nom., Minnesota v. NRC, 602 F.2d 412 (D.C. Cir. 1979).

Pacific Gas and Electric Company (Diablo Canyon Nuclear Power Plants, Units 1 and 2), LBP-93-1, 37 NRC 5, 30 (1993). As stated recently in this regard by the Commission in conjunction with the decommissioning of Yankee Rowe:

> Despite the NRC's 1988 generic review of the DECON-SAFSTOR choice, Petitioners seek to revisit that choice case-by-case, basing their objections on essentially the same factors that the Commission weighed when concluding that either SAFSTOR or DECON was a reasonable decommissioning choice. But Petitioners' approach unreasonably "would require the agency continually to relitigate issues that may be established fairly and efficiently in a single rulemaking proceeding. Significantly, the Supreme Court has found [that] agency reliance on prior determinations to be perfectly acceptable, even when the statute before it plainly calls for individualized hearings and findings."

Yankee Atomic Electric Company, supra, CLI-97-7, 43 NRC at 251 (citations, quotations and footnotes omitted).

As will be discussed further below, many of the Petitioners' contentions constitute collateral attacks on Commission rules and regulations and must therefore be rejected.[3] For example, Petitioners' contentions that the Private Fuel Storage Facility will become a permanent spent fuel repository seek to relitigate the same issues decided in the Commission's Waste Confidence Rulemaking, 10 C.F.R. § 51.23. Similarly, Petitioners raise numerous other contentions that would, if admitted, improperly litigate in this proceeding generic determinations made in conjunction with previous rulemakings (such

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[3] 10 C.F.R. § 2.758 establishes an explicit procedure under which a party may seek a waiver from the application of a rule or regulation by showing the existence of special circumstances such that the application of a rule or regulation would not serve the purposes for which the rule or regulation was adopted. 10 C.F.R. § 2.758(b)-(d). Petitioners have not sought any such waivers here.

as the environmental effects of transporting spent nuclear fuel) as well as generic determinations that will be made in conjunction with ongoing rulemakings (such as the certification of the Sierra Nuclear and Holtec cask systems).

Second, licensing boards "are delegates of the Commission" and, as such, they may "exercise only those powers which the Commission has given to [them]." Public Service Co. (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-316, 3 NRC 167, 170-71 (1976); accord Portland General Electric Company (Trojan Nuclear Plant), ALAB-534, 9 NRC 287, 289-90 n.6 (1979). Accordingly, it is well established under Commission precedent that a contention is not cognizable unless it is material to a matter that falls within the scope of the proceeding for which the licensing board has been delegated jurisdiction as set forth in the Commission's Notice of Opportunity for Hearing. Id.; see also Commonwealth Edison Company (Zion Station, Units 1 and 2), ALAB-616, 12 NRC 419, 426-27 (1980); Commonwealth Edison Company (Carroll County Site), ALAB-601, 12 NRC 18, 24 (1980). The Notice of Opportunity for Hearing in this case delineates the scope of the present licensing proceeding as follows:

> The [NRC] is considering an application . . . for a materials license, under the provisions of 10 C.F.R. part 72, . . . to possess spent fuel and other radioactive materials associated with spent fuel storage in an . . . [ISFSI] located on the Skull Valley Goshute Indian Reservation . . . . If granted, the license will authorize the applicant to store spent fuel in dry storage cask systems at the ISFSI which the applicant proposes to construct and operate on the Skull Valley Indian Reservation.

62 Fed. Reg. 41,099 (1997). Thus, contentions raising issues unrelated to the granting or denying of the 10 C.F.R. Part 72 materials license sought by PFS (such as many of the

Petitioners' transportation contentions as discussed further below) must be rejected as being beyond the scope of this proceeding.

Third, the specific issues of law or fact raised or controverted by a contention must be material to the granting or denial of the license at issue. This general limitation on the admission of contentions is expressly provided for by the 1989 amendments to 10 C.F.R. § 2.714 and is implicit in the NRC precedent prior to the 1989 amendments. In the statement of considerations to the 1989 amendments, the Commission defined a "material" issue as meaning that the "resolution of the dispute would make a difference in the outcome of the licensing proceeding." 54 Fed. Reg. at 33,172 (emphasis added). Thus, immaterial issues are subject to dismissal under 10 C.F.R. § 2.714(d)(2)(ii) because, even if proven, they "would not entitle [the] petitioner to relief."

For a contention raising non-environmental issues to be material, it must assert a significant health and safety concern with respect to the license application.[4] The contention "must either allege with particularity that an applicant is not complying with a specified [safety] regulation, or allege with particularity the existence and detail of a substantial safety issue . . . ." Seabrook, supra, LBP-82-106, 16 NRC at 1656; accord

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[4] As stated by the Commission in the statement of considerations to the 1989 amendments:

> Apart from NEPA issues, . . . a contention will not be admitted if the allegation is that the NRC staff has not performed an adequate analysis. With the exception of NEPA issues, the sole focus of the hearing is on whether the application satisfies NRC regulatory requirements, rather than the adequacy of the NRC staff performance. See, e.g., Pacific Gas and Electric Company (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-728, 17 NRC 777, 807, review declined, CLI-83-32, 18 NRC 1309(1983).

54 Fed. Reg. at 33,172.

Duke Power Company (Catawba Nuclear Station, Units 1 and 2), LBP-82-116, 16 NRC 1937, 1946 (1982).[5] Thus, for example, contentions concerning alleged deficiencies in a decommissioning plan must not only allege and provide sufficient bases to show the deficiencies but also show that the purported deficiencies have "some [independent] health and safety significance" such that reasonable assurance of the public health and safety with respect to decommissioning is no longer assured. Yankee Atomic Electric Company, supra, LBP-96-2, 43 NRC at 75; see also Yankee Atomic Electric Company, supra, CLI-96-7, 43 NRC at 258 ("Petitioners must show some specific, tangible link between the alleged errors in the plan and the health and safety impacts they invoke").

The requirement that contentions raise issues material to the granting or denial of the license subject of the licensing proceeding ensures that contentions have concrete application to the facility in question and precludes the litigation of generalized claims unrelated to the facility. See, e.g., Duquesne Light Company (Beaver Valley Power Station, Unit No. 1), ALAB-109, 6 A.E.C. 243, 246 n.5 ("a contention which has no application to the facility in question cannot serve as the basis for the granting of [a] petition"); Peach Bottom, supra, ALAB-216, 8 A.E.C. at 21, n.33 ("if someone wants to advance generalizations regarding his particular views of what applicable policies ought to be, a role other than as a party to a trial-type hearing should be chosen"), quoting Duke

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[5] As stated by the licensing board in Catawba, a contention that raises a significant safety problem "would be enough to raise an issue" under 10 C.F.R. § 50.57(a)(3) which requires a finding of "'reasonable assurance' of operation 'without endangering the health and safety of the public'" for the issuance of an operating license. 16 NRC at 1946. Similar findings of reasonable assurance are required for the issuance of a license under 10 C.F.R. § Part 72. See 10 C.F.R. § 72.40.

Power Company (William B. McGuire Nuclear Station, Units 1 & 2), ALAB-128, 6 A.E.C. 399, 401 (1973).

C. The Detailed Pleading Requirements Of 10 C.F.R. § 2.714(b)(i)-(iii)

The detailed pleading requirements of 10 C.F.R. § 2.714(b)(i)-(iii) added by the 1989 amendments "heighten[ed] the specificity requirements for pleadings filed by parties seeking to intervene in [formal] licensing proceedings." Yankee Atomic Electric Company, supra, CLI-96-7, 43 NRC at 248, citing Union of Concerned Scientists v. NRC, 920 F.2d 50, 51-52 (D.C. Cir. 1990). As summarized by the Commission in Yankee Atomic:

> For a contention to be admissible, a petitioner must refer to the specific portion of the license application being challenged, state the issue of fact or law associated with that portion, and provide a "basis" of alleged facts or expert opinions, together with references to specific sources and documents that establish those facts or expert opinions. The basis must be sufficient to show that a genuine dispute exists on a material issue of fact or law.

43 NRC at 248-49.[6]

1. The Pleading Requirements Of 10 C.F.R. § 2.714(b)(2)(i) & (ii)

Under the amended Rules of Practice a petitioner must set forth "[a] brief explanation of the bases of the contention." 10 C.F.R. § 2.714(b)(2)(i). Further, a petitioner must provide:

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[6] The Commission noted that the rules for NEPA contentions are slightly different. The regulation, 10 C.F.R. § 2.714(b)(2)(iii), requires NEPA contentions to be based on the applicant's environmental report but permit petitioners to amend their contentions "if the data or conclusions in subsequent Commission environmental documents differ significantly from the data or conclusions in the applicant's environmental report." 43 NRC at 249 n.8.

> A concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing, together with references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion.

10 C.F.R. § 2.714(b)(2)(ii).

The Commission has made clear that the requirement of 10 C.F.R. § 2.714(b)(2)(ii) for the provision of specific reference to documents or other sources of information has the effect of overturning prior precedent which had previously held that section 2.714 did not require a petitioner to describe facts which would be offered in support of a proposed contention. 54 Fed. Reg. at 33,170. The Rules of Practice now require that a petitioner include facts in support of its position in order to demonstrate that a genuine dispute as to a material issue of law or fact exists. Id. As observed by the Commission, such a requirement is consistent with judicial decisions, such as Connecticut Bankers Ass'n v. Board of Governors, 627 F.2d 245, 251 (D.C. Cir. 1980) which held that:

> [A] protestant does not become entitled to an evidentiary hearing merely on request, or on a bald or conclusory allegation that . . . a dispute exists. The protestant must make a minimal showing that material facts are in dispute, thereby demonstrating that an "inquiry in depth" is appropriate.

Id. As the Commission further observed, a contention therefore is not to be admitted "where an intervenor has no facts to support its position and where the intervenor

contemplates using discovery or cross-examination as a fishing expedition which might produce relevant supporting facts." 54 Fed. Reg. at 33,171.[7]

Thus, under the amended Rules of Practice a statement "that simply alleges that some matter ought to be considered" does not provide a sufficient basis for an admissible contention. Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 246 (1993), review declined, CLI-99-02, 39 NRC 91 (1994). Nor is the mere citation of an alleged factual basis for a contention sufficient. Rather, a petitioner is obligated "to provide the [technical] analyses and expert opinion" or other information "showing why its bases support its contention." Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 284, vacated in part and remanded on other grounds, CLI-95-10, 42 NRC 1, aff'd in part, CLI-95-12, 42 NRC 111 (1995). Where a petitioner has failed to do so, "the licensing board may not make factual inferences on [the] petitioner's behalf." Id., citing Palo Verde, supra, CLI-91-12, 34 NRC 149. Thus, for example, a petitioner must set forth a "technical basis in references or expert opinion" in order to support a claim that certain accident scenarios will cause an accidental release of radioactive materials. Georgia Tech Research Reactor, LBP-95-6, 41 NRC at 302; see also id. at 306-07.

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[7] See also Duke Power Company (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 NRC 460, 468 (1982), vacated in part on other grounds, CLI-83-19, 17 NRC 1041 (1983) ("[A]n intervention petitioner has an ironclad obligation to examine the publicly available documentary material pertaining to the facility in question with sufficient care to enable [the petitioner] to uncover any information that could serve as the foundation for a specific contention. Stated otherwise, neither Section 189a of the Act nor Section 2.714 of the Rules of Practice permits the filing of a vague, unparticularized contention, followed by an endeavor to flesh it out through discovery against the applicant or staff.").

Further, licensing boards "must do more than uncritically accept a party's mere assertion that a particular document supplies the basis for its contention, without even reviewing the document itself to determine if it in fact says what the party claims it says and if it appears to support a litigable contention. Otherwise the contention-admission inquiry would be a meaningless exercise." Vermont Yankee Nuclear Power Corporation (Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29, 48 (1989), vacated in part on other grounds and remanded, CLI-90-4, 31 NRC 333 (1990). As the Appeal Board went on to state:

> Thus, licensing boards are expected to undertake a thoughtful, albeit non-merits, review of any document, information, theory, postulated accident scenario, etc., that is claimed to provide the basis for a contention. See, e.g., Limerick, ALAB-804, 21 NRC at 593-94 (because cited environmental document "does not support the point for which it is urged," contention thus lacks a "cognizable basis").

Id.; accord Yankee Atomic Electric Company, supra, LBP-96-2, 43 NRC at 90 ("[a] document put forth by an intervenor as the basis for a contention is subject to scrutiny both for what it does and does not show"); Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), CLI-89-3, 29 NRC 234, 241 (1989) ("where a contention is based on a factual underpinning in a document that has been essentially repudiated by the source of that document, the contention may be dismissed unless the intervenor offers another independent source").

2. The Pleading Requirements Of 10 C.F.R. § 2.714(b)(2)(iii)

Under the Rules of Practice as amended, 10 C.F.R. § 2.714(b)(2)(iii) requires a petitioner to provide:

> Sufficient information . . . to show that a genuine dispute exists with the applicant on a material issue of law or fact. This showing must include references to the specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.

The Statement of Considerations states this provision "will require the intervenor to read the pertinent portions of the license application, including the Safety Analysis Report and the Environmental Report, state the applicant's position and the petitioner's opposing view." 54 Fed. Reg. at 33,170. If the petitioner does not believe these materials address a relevant issue, the petitioner is "to explain why the application is deficient." Id. See also Palo Verde, supra, CLI-91-12, 34 NRC at 155-56.

Thus, a contention that does not directly controvert a position taken by the applicant in the license application is subject to dismissal. See Texas Utilities Electric Company (Comanche Peak Steam Electric Station, Unit 2), LBP-92-37, 36 NRC 370, 384 (1992). Further, a contention that mistakenly claims that the applicant failed to address a relevant issue in the application must also be dismissed. See, e.g., Georgia Power Company (Vogtle Electric Generating Plant, Units 1 and 2), LBP-91-21, 33 NRC 419, 424 (1991) ("[t]he claim that the Applicants have not shown a 'reasonable basis' for

the proposed change . . . ignores the reasons set forth by the Applicants for the change and fails to take issue with any of those reasons"); Rancho Seco, supra, LBP-93-23, 38 NRC at 247-48 (the claim that the "EA's findings are inadequate because there is no discussion" of the licensee's decommissioning activities or the associated environmental impacts ignores that the "entire EA discusses the decommissioning activities to be performed" by the licensee as well as the associated environmental impacts and "makes no showing that any of these matters are misstated . . . ."). In such circumstances, relative to the purported lack of information or lack of analysis, "there is no material factual dispute that warrants further inquiry." General Public Utilities Nuclear Corporation (Oyster Creek Nuclear Generating Station), LBP-96-23, 44 NRC 143, 163 (1996).

D. Scope of Contentions

Many of the contentions filed by the Petitioners allege a general inadequacy in the License Application (e.g., the Applicant has failed to demonstrate that it is financially qualified) followed by specific assertions in the basis as to the manner in which the Application is allegedly deficient. It is well established under Commission precedent, that the scope of a contention is determined by its literal terms, coupled with its stated bases. See, e.g., Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-899, 28 NRC 93 (1988). In that case, in assessing whether the scope of the intervenor's contention embraced the issue of microbiologically-induced corrosion, the Appeal Board considered the explicit phrasing of the contention as well as the basis stated for it. The Appeal Board stated that

> The reach of a contention necessarily hinges upon its terms coupled with its stated bases. . . . [O]ne purpose of the

> requirement in [§]2.714(b) that the bases of a contention be set forth with reasonable specificity is to put the other parties on notice as to what issues they will have to defend against or oppose. Thus, where a question arises as to the admissibility of a contention, we look to both the contention and its stated bases. . . . [W]here the issue is the scope of a contention, there is no good reason not to construe the contention and its bases together in order to get a sense of what precise issue the party seeks to raise.

28 NRC at 97 (emphasis added)(citations omitted).

Similarly in Illinois Power Company (Clinton Power Station, Unit 1), LBP-81-61, 14 NRC 1735 (1982), the licensing board held that contentions must be narrowed to fit their stated bases. In analyzing the admissibility of contentions "making broad allegations plus specific allegations that provide the bases for the broad range," the Board ruled that

> Where a contention is made up of a general allegation which, standing alone, would not be admissible under 10 C.F.R. §2.714(b), plus one or more alleged bases for the contention set forth with reasonable specificity, the scope of the matters in controversy raised by such contention are limited by the specific alleged basis or bases set forth in the contention.

Id. (emphasis added). Accord, Cleveland Electric Illuminating Company (Perry Nuclear Power Plant, Units 1 and 2), LBP-81-35, 14 NRC 682 (1981).

Thus the scope of a broadly worded contention is limited by the specific assertions made in its bases. Accordingly, in analyzing the admissibility of the Petitioners' contentions, the Applicant has proposed that the contentions be restated to incorporate the specific allegations from their bases. This serves to focus the analysis of

whether each contention is admissible and, in the event the contention were admitted, better define the precise issues to be litigated within the scope of the contention.

E. Incorporation by Reference

Two petitioners, Castle Rock and Confederated Tribes, seek to expand vastly their roles in this proceeding by incorporating by reference the contentions and bases of another petitioner. Thus, with a simple stroke (for example, Castle Rock merely states: "[p]etitioners Castle Rock and Skull Valley Co. by this reference adopt in its entirety each and every contention filed by the State of Utah and incorporate each herein by this reference."), Castle Rock and Confederated Tribes would have the Board consider their roles as placing in controversy not only the 63 pages or 8 pages of text they respectively filed, but as well the 168 pages of contentions and bases filed by the State. This is not what the Commission intended when it amended its Rules of Practice in 1989, if it ever would have allowed such a practice.

The 1989 amendments to 10 C.F.R. Part 2 raised the threshold for the admission of contentions, requiring the proponent of the contention to supply information showing the existence of a genuine dispute with the applicant. The new rule, the Commission stated, would require the petitioner "to read the pertinent portions of the license application, including the Safety Analysis Report and the Environmental Report, state the applicant's position and the petitioner's opposing view." 54 Fed. Reg. at 33170.

Responding to complaints that the new rule was inappropriate, the Commission pointed out that a member of the public has no absolute right or unconditional right to intervene in a licensing proceeding, but rather a conditional right, conditioned upon a

proper request. Id. It acknowledged that "the new rule [might] require persons seeking intervention to do more work at an earlier stage of the proceeding than under [its prior] regulations." Id. at 33171. Specifically the Commission stated its belief that it was a reasonable requirement that before a person or organization is admitted to the proceeding it read the portions of the application that are of concern to it and demonstrate that a dispute exists between it and the applicant on a material issue of fact or law. Petitioners Castle Rock's and Confederated Tribes' shorthand incorporation-by-reference approach does not comport with the Commission's intent.

In the same rule change, the Commission amended 10 C.F.R. §§ 2.754 and 2.762 to limit an intervenor's filings of proposed findings of fact and conclusions of law to issues which that party actually placed in controversy or sought to place in controversy in the proceeding, and similarly limit the issues an intervenor could raise in an appellate brief. In addressing comments on this aspect proposed rule, the Commission stated:

> We disagree with the suggestion that the proposed limitations will cause intervenors to raise a multitude of issues or adopt each other's contentions in order to preserve their rights, and thus, will prolong and overwhelm the hearing process with the attendant high level of participation on all issues. The new standards for admission of contentions that we are adopting as part of this rulemaking should serve to limit the degree to which any party can gain admission of contentions that are frivolous or in which the party has little real interest. Moreover, existing §§ 2.715a and 2.718 which authorize the presiding officer to consolidate parties, issues and adjudicatory presentations, can and should be used to limit unnecessary multi-party presentations and participation in the litigation of common contentions.

Id. at 33178.

Confronted here with the precise situation contemplated at the time of the rule change in 1989, the Board should follow the Commission's guidance. It should either preclude this gross abuse by disallowing the incorporation by reference entirely, or where allowed, require that the parties consolidate their discovery, evidentiary, and appellate rights with one enumerated party taking responsibility for each contention. In this way the State's contentions would be split up between the three parties with one of the three taking responsibility. Otherwise it is inconsistent with the Commission's present Rules of Practice and prejudicial to Applicant. If the incorporation by reference is allowed as requested, without any showing of adherence to the rigors of 10 C.F.R. § 2.714, a petitioner can argue about the admissability of any other petitioner's contentions, participate in discovery on any other party's contentions, present evidence on any other party's issues, file findings on every other party's issues and take appeal on any issue. This is totally contrary to the Commission's Rules of Practice as amended in 1989.

III. SKULL VALLEY BAND CONTENTIONS

The Skull Valley Band has presented one contention in its Supplemental Petition which provides as follows:

> The License Application for the Private Fuel Storage Facility Filed by Private Fuel Storage L.L.C. is meritorious and should be granted.

Skull Valley Band Petition to Intervene at 2. The Applicant supports the admission of this contention. As stated by the Band in its petition.

> The Band fully supports the Private Fuel Storage Facility and is greatly interested and affected by the success, or lack thereof, of the license application and siting of the proposed

> facility. The Band's intervention is necessary to protest its interests in the success of the license application which is meritorious and should be granted.

Id.

NRC case law establishes that a contention by a party that supports the license application, such as that submitted by the Band, satisfies the contentions requirement of 10 C.F.R. § 2.714(b). Nuclear Engineering Co., Inc. (Sheffield, Illinois, Low-Level Radioactive Waste Disposal Site), ALAB-473, 7 NRC 737, 743 (1978). As stated by the Appeal Board in Sheffield:

> [I]n the case of a petitioner who supports the license application, all that need by initially asserted in fulfillment of [the contentions] requirement is that the application is meritorious and should be granted. Indeed it would be patently unreasonable to expect more of such a petitioner in advance of his being informed of the basis of any opposition which might be filed to the application.

Id. at 743 n.5. Accordingly, the Licensing Board should admit the above contention of the Band.

IV. UTAH CONTENTIONS

The State has filed 25 contentions[8] to which the Applicant responds as set forth below.

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[8] See State of Utah's Contentions on the Construction and Operating License Application by Private Fuel Storage, LLC for an Independent Spent Fuel Storage Facility (hereinafater "State Petition"), dated November 23, 1997.

A. Utah Contention A: Statutory Authority

1. The Contention

The State alleges in Contention A that:

> Congress has not authorized NRC to issue a license to a private entity for a 4,000 cask, away-from reactor, centralized, spent nuclear fuel storage facility.

State Petition at 3. The asserted bases for the contention are set forth in nine pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated incorporating the specific allegations in its bases as indicated below:

> Congress has not authorized NRC to issue a license to a private entity for a 4,000 cask, away-from reactor, centralized, spent nuclear fuel storage facility in that:
>
> a) The NWPA defines the scope of facilities authorized for interim storage of spent nuclear fuel and authorized storage of spent nuclear fuel away from reactors only at federally owned facilities.
>
> b) Congress, in the NWPA, imposed limits on centralized storage of spent nuclear fuel: (1) at a federally owned and operated facility; (2) with a maximum storage capacity of 1,900 metric tons; (3) which minimized the transportation of spent nuclear fuel; (4) which would be removed not later than three years following the date on which a repository or MRS facility is available; (5) with annual reports to Congress; and (6) with the involvement of the host state in the process and financial assistance to the state by the federal government.

2. Applicant's Response to the Contention

State Contention A challenges the authority of the NRC to issue a license to Applicant under Part 72, and thus impermissibly challenges a Commission rule. As discussed more definitively below, clearly the Commission believes it has the authority and has exercised it. It is not within the authority of a licensing board to entertain a challenge to that authority. A contention seeking that challenge is simply not appropriate for litigation in a licensing proceeding and must be summarily rejected. Philadelphia Electric Company (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 A.E.C. 13, 20 (1974).

In any event, the Commission's rules at 10 C.F.R. Part 72 set forth the requirements, procedures, and criteria for the issuance of licenses to receive, transfer and possess power reactor spent fuel and other radioactive materials associated with spent fuel storage in a private independent spent fuel storage installation ("ISFSI") or in a federal monitored retrievable storage facility ("MRS"). The NRC's authority to issue a license for an ISFSI, either at a reactor site or away from a reactor site, is found in the Atomic Energy Act of 1954, as amended. The specific sections of the Atomic Energy Act which provide the statutory authority are set forth in the Authority paragraph at the beginning of Part 72. There can be no question that the Atomic Energy Act provides the statutory authority for Part 72. The regulatory scheme authorized by the Atomic Energy Act has been described by the U. S. Court of Appeals for the D. C. Circuit as "virtually unique in the degree to which broad responsibility is reposed in the administering agency, free of close prescription in its charter as to how it shall proceed in achieving the statutory

objectives." Siegel v. AEC, 400 F.2d 778, 783 (D.C. Cir. 1968). State Contention A is a challenge to the NRC's exercise of its responsibility under the Atomic Energy Act and is therefore inadmissible as a contention.

Part 72 predates the Nuclear Waste Policy Act of 1982 ("NWPA"). See 45 Fed. Reg. 74,693 (Nov. 12, 1980). After the NWPA, Part 72 was amended to address the licensing of a federally-owned and operated MRS. See 53 Fed. Reg. 31,651 (Aug. 19, 1986). However, while the NWPA did authorize the construction and operation of a federally funded and operated MRS under certain conditions, the NWPA did not repeal the NRC's existing authority under the Atomic Energy Act to license interim storage of spent nuclear fuel away from reactors at non-federal sites. In fact, the Commission had issued a license under Part 72 to a private, away-from-reactor ISFSI before the NWPA was enacted. See NRC Docket 72-1, Materials License No. SNM-2500, (General Electric Company, Morris Operation). Amendments 2 through 9 to this license were issued after the passage of the NWPA. See, e.g., Amendment No. 9 to License SNM-2500, dated June 16, 1995 (NRC Docket No. 72-1). The NRC would not have authority to issue amendments to a license if it had no authority to issue the license in the first instance.[9]

The State argues, in effect, that the NRC's authority to license away-from-reactor ISFSIs was repealed by implication in the scheme established for a federal MRS. However, repeal of statutes by implication are strongly disfavored as a matter of law. See

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[9] In issuing a license amendment, the Commission will be guided by the considerations that govern the issuance of initial licenses. 10 C.F.R. §72.58. Obviously, the Commission has made a determination on eight occasions (Amendments 2 through 9 of Materials License SNM-2500) since the NWPA that it has the authority to issue a license under Part 72 to a non-federal away-from-reactor spent fuel storage facility.

Morton v. Mancuri, 417 U.S. 535, 549 (1974). The NRC has not interpreted the NWPA as a repeal of its authority. Nor, for that matter, has DOE claimed that it has exclusive authority to build and operate an away-from-reactor spent fuel storage facility. There is no support for Utah's Contention A in the NWPA, in its legislative history, or in the subsequent interpretation of the NWPA by the agencies primarily charged with implementing it.[10]

Utah Contention A must be rejected. It impermissibly challenges a Commission rule. In any event, the NWPA did not repeal the Commission's authority to license an ISFSI under Part 72.

B. Utah Contention B: License Needed for Intermodal Transfer Facility

1. The Contention

The State alleges in Contention B that:

> PFS's application should be rejected because it does not seek approval for receipt, transfer, and possession of spent nuclear fuel at the Rowley Junction Intermodal Transfer Point ("ITP"), in violation of 10 CFR § 72.6(c)(1).

State Petition at 10. The asserted bases for the contention are set forth in six pages of discussion following the contention. In order to focus the analysis on whether the

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[10] In a case in which the U. S. Court of Appeals for the Ninth Circuit sought to determine the applicability of the NWPA to pre-existing storage agreements for spent fuel between DOE and a private party, the court held that "the interim storage provisions of the Nuclear Waste Policy Act are not comprehensive regulations governing all federal storage of nuclear waste, but remedial legislation addressed to a specific problem." Idaho v. U. S. Dep't of Energy, 945 F.2d 295, 298-99 (9th Cir. 1991), cert. denied, 504 U.S. 956 (1992). The NWPA simply did not preempt the field with respect to private storage of spent nuclear fuel.

contention should be admitted, the Applicant proposes that the contention be restated incorporating the specific allegations in its bases as indicated below:

> PFS's application should be rejected because it does not seek approval for receipt, transfer, and possession of spent nuclear fuel at the Rowley Junction Intermodal Transfer Point ("ITP"), in violation of 10 C.F.R. § 72.6(c)(1), in that:
>
> a) The Rowley Junction operation is not merely part of the transportation operation but a de facto interim spent fuel storage facility at which PFS will receive, handle, and possess spent nuclear fuel for extended periods of time.
>
> b) The anticipated volume and quantity of fuel shipments that will pass through Rowley junction is a large magnitude that is unlike the intermodal transfer operations that previously occurred with respect to shipments of spent nuclear fuel from commercial nuclear power plant sites.
>
> c) The volume of fuel shipments will not be capable of passing directly through Rowley Junction and some type of temporary storage of casks will be necessary at the site of the ITP, thus, making Rowley Junction a spent nuclear fuel storage facility. Further PFS fails to discuss the number of heavy haul trucks that will be available to haul casks, the mechanical reliability of these units, and their performance under all weather conditions which is necessary to analyze the amount of queuing and storage that will occur at Rowley Junction.
>
> d) Because the ITP is stationary, it is important to provide the public with the regulatory protections that are afforded by compliance with 10 C.F.R. Part 72, including a security plan, an emergency plan, and radiation dose analyses.

2. Applicant's Response to the Contention

Utah Contention B, asserting that a storage license under 10 C.F.R. Part 72 is required for the ITP, is a direct challenge to Commission regulation and must be rejected. The spent fuel passing through Rowley junction is in transit to the proposed ISFSI. PSF will not be receiving, handling and storing fuel at the ITP as reflected by the fact spent fuel will be contained in shipping casks regulated and certified by the Commission under 10 C.F.R. Part 71, and not storage casks, certified and regulated under 10 C.F.R. Part 72.

Shipping casks are required to be designed to rigorous requirements in order to ensure the containment of radioactivity. See 10 C.F.R. Part 71 Subpart E. In promulgating these requirements, the Commission has concluded that shipping casks designed and certified to 10 C.F.R. Part 71 "are adequate to protect the public against unreasonable risk in the transport" of spent nuclear fuel. Shipments of Fuel From Long Island Power Authority's Shoreham Nuclear Power Station to Philadelphia Electric Company's Limerick Generating Station, DD-93-22, 38 NRC 365, 369 (1993) ("Shoreham to Limerick Spent Fuel Shipments".) As stated there in rejecting arguments similar to those made by the State here:

> Primary reliance for safety in transport of radioactive material is placed on the packaging. . . . NRC approval for the [spent fuel transportation] package design requires a finding that the package can withstand the performance tests in Part 71 without releasing its contents, without emitting radiation in excess of strictly defined limits, and without occurrence of a nuclear chain reaction. See 10 C.F.R. Part 71, Subparts E and F.

See Shoreham to Limerick Spent Fuel Shipments, DD-93-22, supra, 38 NRC at 373.

As was the conclusion in Shoreham to Limerick Spent Fuel Shipments, the intermodal transfer of spent fuel in transit does not require additional regulatory approvals beyond the general licenses provided for the transportation of spent fuel in shipping casks certified under 10 C.F.R. Part 71. Id. at 375. No additional regulatory approvals are needed because of the Commission's generic determination that shipment in such casks are adequate to protect the public health and safety.

Thus, as will be developed further below in responding to the specific assertions raised by the State in this contention, it must be rejected as an impermissible attack on Commission regulations.

a) De Facto Interim Spent Fuel Storage Facility

The State contends that the intermodal transfer operation at Timpe (Rowley Junction) is not merely part of the transportation operation but a de facto interim storage facility at which PFS will receive, handle, and possess spent nuclear fuel for extended periods of time. State Petition at 11-14. Accordingly the State claims that the ITP must be licensed as a spent fuel storage facility by the NRC under 10 C.F.R. Part 72. Id. This contention must be rejected as an impermissible challenge to the regulations of the Commission and the Department of Transportation ("DOT"). See 10 C.F.R. § 2.758; see also 49 C.F.R. § 106.31 (persons must petition DOT for rulemaking to establish, amend, or repeal a regulation). First, the shipment of spent nuclear fuel -- including the transfer at the intermodal transfer site -- is done pursuant to a general license authorized under 10 C.F.R. Part 71. Second, the facility and activities at the intermodal transfer site do not

constitute storage of spent nuclear which would require a license under 10 C.F.R. Part 72. Each is discussed in turn below.

(i) General License to Transport Spent Fuel, Including the Intermodal Transfer of the Transportation Cask Containing the Spent Fuel

A general license to transport spent fuel, including transfer from one mode to another and temporary storage, is granted by NRC in 10 C.F.R. §§ 70.20a and 71.12. Federal law establishes that all possession of special nuclear material, including spent fuel, must be licensed by the NRC. See Atomic Energy Act of 1954, as amended, §§ 57, 62, 81, 42 U.S.C. §§ 2077, 2092, 2111 (1994). The Commission has issued, through rulemaking, "a general license . . . to any licensee of the Commission to transport, or to deliver it to a carrier for transport, licensed material [including spent fuel] in a package for which a license, certificate of compliance, or other approval has been issued by the NRC." 10 C.F.R. § 71.12.[11] The Commission has also issued general licenses to "any person to possess . . . irradiated reactor fuel . . . in the regular course of carriage for another or storage incident thereto," 10 C.F.R. § 70.20a(a), and to "any person to possess transcent shipments of . . . irradiated reactor fuel," 10 C.F.R. § 70.20b(a)(3). Thus, although NRC licenses are required to possess and transport spent fuel, general licenses for this purpose have already been granted by the Commission through rulemaking.

The Commission has confirmed that its rules establish "a general license for NRC licensees to transport licensed nuclear material in NRC-approved containers[;] 10 C.F.R.

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[11] See 10 C.F.R. § 71.4 (1996) (defining "carrier") and 49 C.F.R. § 171.8 (1995) (same).

§ 71.12." State of New Jersey (Department of Law and Public Safety's Requests Dated October 8, 1993), CLI-93-25, 38 NRC 289, 294 (1993) (State of New Jersey challenging the shipment of spent fuel by barge and rail from Shoreham to Limerick under the NRC's general license provisions). In that case the Commission held that a licensee is not required to apply for or obtain a specific license in order to transport spent fuel because "the rule establishing the general license [under 10 C.F.R. § 71.12], in effect, replaces individual licensing proceedings." Id. (emphasis in original). The Commission concluded that a NRC licensee's use of a general transport license to transport spent fuel can not be challenged by a petitioner in an adjudicatory hearing. Id.

Moreover, the general license under 10 C.F.R. § 71.12 covers the intermodal transfer of a transportation cask from one mode of transportation to another. In the above case, the State of New Jersey had challenged the shipment of spent fuel from the Shoreham facility on Long Island to the Limerick facility in Pennsylvania under the provisions of the 10 C.F.R. § 71.12 general license. See id. at 290.[12] The transportation of spent fuel contested by New Jersey involved:

> the transportation of fuel [in a sealed transportation cask] by barge from the Shoreham facility to the Eddystone Power Station [non-nuclear] located on the Delaware River, in Eddystone, Pennsylvania. . . .. The nuclear fuel is then shipped by rail from Eddystone to the Limerick facility.

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[12] The petitioner State of New Jersey challenged the spent fuel shipments through a petition for an adjudicatory hearing submitted to the Commission, see generally id., and a request for NRC action under 10 C.F.R. § 2.206. See id. at 291; see also Shoreham to Limerick Spent Fuel Shipments, DD-93-22, supra 38 NRC 365 (companion case to CLI-93-25, supra; director's decision denying the State of New Jersey's 10 C.F.R. § 2.206 petition challenging the shipment of spent fuel by barge and rail from Shoreham to Limerick.)

Shoreham to Limerick Spent Fuel Shipments, DD-93-22, supra, 38 NRC at 371 (emphasis added). The spent fuel transportation included intermodal transfer of the sealed transportation cask from the barge mode to the rail mode at the Eddystone Power Station. The Eddystone Power Station is not a nuclear facility and is not licensed by the Commission. The spent fuel was "transported in an NRC-approved cask certified pursuant to 10 C.F.R. Part 71." Id.

Regarding the transportation at issue in that case, the Director's decision determined that

> Under the existing regulatory scheme, a licensee's transport of nuclear fuel is by general license. No NRC approval of the specific route by which the Shoreham fuel is transported to Limerick.

Id. at 375 (emphasis added). The specific route to Limerick included the intermodal transfer at Eddystone. The Director's Decision further specifically noted that a Commission "licensee can act without NRC approval" in the "selection of a transport means and route of the fuel shipments." Id. (emphasis added). The Commission similarly held:

> A general license . . . is granted by rule and may be used by anyone who meets the terms of the rule, 'without the filing of applications with the Commission or the issuance of licensing documents to particular person' . . . . Thus . . . [the utility licensee shipping the fuel] was not required to obtain an individual license . . . for transporting the [utility] fuel.

New Jersey, CLI-93-25, supra, 38 NRC 293-94, quoted in Shoreham to Limerick Spent Fuel Shipments, DD-93-22, supra, 38 NRC at 379 (emphasis added).

In dismissing the State of New Jersey's challenge the transportation of spent fuel by barge and rail under the Commission's general license provisions, the Director's decision stated:

> The State's complaint really lies not with the implementation of existing regulations, but with perceived deficiencies in the overall regulatory scheme.
>
> . . .
>
> Petitioner is free to argue that existing regulations are inconsistent with authorizing statutes when seeking redress through appropriate means, such as a petition for rulemaking under 10 C.F.R. § 2.802(a) for changes to the NRC packaging and transportation regulations.

Shoreham to Limerick Spent Fuel Shipments, DD-93-22, 38 NRC at 375. No Commission decision has ever held that intermodal transfer of a transportation cask between different transportation modes requires a specific license from the Commission.

In the instant matter, the transportation of spent fuel from the originating reactors to the PFSF will be performed by either the utilities that are licensed by the Commission to own or operate the originating reactor, or by PFS which will be licensed to own and operate the ISFSI. In either case the shipping will be done by a "licensee of the Commission" under the "general license . . . to . . . transport, or to deliver it to a carrier for transport, licensed material [including spent fuel] in a package for which a license, certificate of compliance, or other approval has been issued by the NRC" See 10 C.F.R. § 71.12, (emphasis added). See also New Jersey, CLI-93-25, 38 N.R.C. at 294.

Further, under the above decisions intermodal transfer falls within the scope of the general license to transport spent fuel under 10 C.F.R. § 71.12. See id. 294[13]; see also Shoreham to Limerick Spent Fuel Shipments, DD-93-22, supra, 38 NRC at 375.[14] Neither the licensee of the originating reactor nor PFSF is required to obtain a specific license to transport the spent fuel, and the use of a general transport license to transport spent fuel, utilizing the intermodal transfer, can not be challenged by a petitioner in an adjudicatory hearing. The State's challenge to the selection of a transportation means and the use of intermodal transfer during transportation between the originating reactors and the PFSF, like the State of New Jersey's challenge in the Shoreham to Limerick Spent Fuel Shipments cases, is a dispute "not with the implementation of existing regulations, but with perceived deficiencies in the overall regulatory scheme." See Shoreham to Limerick Spent Fuel Shipments, DD-93-22, 38 NRC at 375. The State's contention must be rejected as an impermissible challenge to the Commission's regulations. 10 C.F.R. § 2.758. As with the State of New Jersey, the State of Utah

> is free to argue that existing regulations are inconsistent with authorizing statutes when seeking redress through appropriate means, such as a petition for rulemaking under 10 C.F.R. § 2.802(a) for changes to the NRC packaging and transportation regulations.

Shoreham to Limerick Spent Fuel Shipments, DD-93-22, supra, 38 NRC at 375..

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[13] The licensee "had authority to transport the fuel under the general license created by 10 C.F.R. § 71.12" and is "not required to obtain an individual license . . . for transporting the [spent] fuel;" transportation included intermodal transfer from barge to rail. New Jersey, CLI-93-25, supra, 38 NRC at 294).

[14] A "licensee can act without NRC approval" under the general license in the "selection of a transport means and route" for spent fuel transportation; transportation included intermodal transfer from barge to rail. Shoreham to Limerick Spent Fuel Shipments, DD-93-22, supra, 38 NRC at 375.

(ii) 10 C.F.R. Part 72 Is Not the Appropriate Regulation for Intermodal Transfer of Sealed Spent Fuel Transportation Casks

10 C.F.R. Part 72 applies to receipt, transfer, and possession of spent fuel to be stored in "a complex that is designed and constructed specifically for storage of power reactor spent fuel . . . . in an independent spent fuel storage installation (ISFSI)." 10 C.F.R. § 72.2(a)(1) (defining the scope of Part 72) (emphasis added). The design of the equipment for the intermodal transfer site rules out the possibility that it could be considered a storage facility subject to Part 72 licensing requirements. In order to fall within the scope of Part 72, a facility must be a "complex . . . designed and constructed specifically for storage of . . . spent fuel." Id. The intermodal transfer site will consist of a rail siding, a single gantry crane, a weather enclosure for the crane, and a tractor/trailer yard area. See Private Fuel Storage Facility Safety Analysis Report ("SAR") at 4.5-3. The site is designed to "accommodate transfer of shipping casks from the rail car to the heavy haul tractor/trailer unit for highway shipping." Id. Nothing in the design of the equipment for intermodal transfer, and nothing cited by the State, in any way indicates that the intermodal transfer site is within the scope of 10 C.F.R. 72 as a "complex . . . designed and constructed specifically for storage of . . . spent fuel." See 10 C.F.R. § 72.2(a)(1).

Moreover, the activities conducted at the ITP do not constitute storage of spent nuclear fuel. Contrary to the State's assertion, PFS will not be "receiving" spent nuclear fuel at the intermodal transfer site. The License Application makes it clear that the PFS "will accept delivery and perform receipt inspection of the spent fuel shipping casks at

the PFSF." SAR at 1.4-1 to 2 (emphasis added). During the rail to truck trailer transfer that would occur at the intermodal transfer site, "the cask and shipping components [impact limiters, a shipping cradle, and tie downs] remain and integral unit under 10 CFR 71 packaging requirements." See id. at 4.5-1. Thus, for the entire time at the intermodal transfer site the spent fuel will remain in the 10 C.F.R. Part 71 certified transportation cask and the State does not claim otherwise.

It is also clear that, contrary to State's assertion, PFS will not be handling spent fuel at the PFSF or the intermodal transfer site under the Commission's interpretation of that term. The Commission has made it clear that "handling" in the context of 10 C.F.R. Part 72 refers to the "handling and repackaging for storage of . . . individual fuel bundles." See 51 Fed. Reg. 19,106, 19,107 (1986) (emphasis added) (discussing the difference between an MRS and an ISFSI). The Commission amended its regulations to clearly differentiate facilities that only "receive, transfer, and possess" spent fuel from those that "receive, transfer, package, and possess" spent fuel.[15] The regulations use the term "handling" only in the definition of MSRs which under the regulations are authorized to repackage spent fuel. See 10 C.F.R. § 72.3. Thus, the handling of sealed casks or canisters is not considered by the Commission to "handle," "package," or "process" spent fuel. See 10 C.F.R. § 72.32(a); 51 Fed. Reg. at 19,107.

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[15] See 10 C.F.R. § 72.1 (differentiating an ISFSI from an MRS) (emphasis added); see also 10 C.F.R. § 72.32 (differentiating a typical ISFSI from an MRS or ISFSI that may "process and/or repackage spent fuel").

Finally, there will be "possession of" the spent fuel at the ITP in the sense of physical control over the transportation casks in which the spent fuel is sealed. However, this possession does not constitute storage of spent fuel under 10 C.F.R. Part 72. As discussed in greater detail in subpart c below, both NRC and DOT regulations allow for temporary storage incident to transportation. Thus, PFS's temporary storage of spent fuel sealed in transportation casks at the intermodal transfer site does not constitute storage of spent fuel under 10 C.F.R. Part 72.

In short, the activities at the intermodal transfer site are an integral part of the transportation of the spent fuel to the site and activities conducted there by PFS do constitute the storage of spent fuel licensable under 10 C.F.R. Part 72. As in New Jersey, supra, the State's challenge here is an impermissible attack on the "overall regulatory scheme" and must be dismissed.

The Applicant addresses below the State's more detailed assertion, set forth in subparts b-d above, and demonstrates that those assertions do not alter the above fundamental conclusion.

b) Volume and Quantity of Fuel Shipments Passing Through Rowley Junction

As set forth above, the State contends that the anticipated volume and quantity of fuel shipments that will pass through Rowley Junction is larger than intermodal transfer operations that have actually occurred at commercial nuclear power plant sites. State Petition at 12. The State provides no basis whatsoever to show that the volume of intermodal transfers changes the underlying regulatory basis for the transfer operation. In

fact, apart from the increased volume of transfers, the transfer of a sealed transportation cask from one transportation mode to another, as an integral unit "with impact limiters, a shipping cradle, and tie downs" (see SAR at 4.5-1), is just like the intermodal transfer of sealed transportation casks that have occurred routinely in spent fuel transportation. See e.g., Shoreham to Limerick Spent Fuel Shipments, DD-93-22, 38 NRC at 371 (transfer of sealed transportation cask from barge to rail car at Eddystone, Pennsylvania). The State's contention, in fact, admits that "intermodal transfer operations . . . have actually occurred at commercial nuclear power plant sites, such as heavy haul truck to onsite rail." State Petition at 12. The State has not said how these operations are any different, other than in volume, from the intermodal transfer operation to transport spent fuel to the PFSF, nor has the State alleged that any of these previous intermodal transfer operations have required a specific license from the Commission. See generally, State Petition at 10-15.

The uncontested fact that the volume of transportation casks transferred will be greater than in the past does not establish a genuine dispute with the Applicant sufficient for a litigable contention. 10 C.F.R. § 2.714(b). There is nothing in the Commission's regulations, nor has the State alleged that there is any, that changes the applicability of the Commission's general license provisions under 10 C.F.R. § 71.12, as a function of the volume of transportation casks shipped. The State's contention that the volume of shipments, and sealed transportation casks transferred, changes the applicability of the Commission's regulations must be rejected as an impermissible challenge to the regulations of the Commission. 10 C.F.R. § 2.758.

c) Temporary Storage of Casks at Rowley Junction

The State asserts that it is reasonable to assume that some type of temporary storage will be necessary at the site and that, at least part of the time, a cask or casks will be present at Rowley Junction, making Rowley Junction a spent nuclear fuel storage facility. State Petition at 13. The State fails to recognize, however, that both NRC and DOT regulations explicitly allow for the temporary storage of sealed shipping casks incident to transportation. The transportation of radioactive materials is regulated by the federal government "under standards devised and administered by the N RC and the U.S. Department of Transportation (DOT)." Shoreham to Limerick Spent Fuel Shipments, DD-93-22, 38 NRC at 372. The Commission's regulations in 10 C.F.R. § 71 explicitly require each licensee who transports spent fuel to "comply with the applicable requirements of the DOT regulations in 49 CFR parts 170 through 189 appropriate to the mode of transport." 10 C.F.R. § 71.5(a).

Storage has long been considered as an activity integral to transportation under the federal law, and is included in the basic statutory definition of transportation. For example, the definition of transportation by rail provides:

> "[T]ransportation" includes--
> (A) a locomotive, car, vehicle, vessel, warehouse, wharf, pier, dock, yard, property, facility, instrumentality, or equipment of any kind related to the movement of passengers or property, or both, by rail, regardless of ownership or an agreement concerning use; and
> (B) services related to that movement, including receipt, delivery, elevation, transfer in transit, refrigeration, icing, ventilation, storage, handling, and interchange of passengers and property[.]

Pub. L. No. 104-88 § 102(a), 109 Stat. 803, 806 (1995)(to be codified at 49 U.S.C. § 10102(9))(emphasis added).[16] Following the statute, DOT regulations governing transportation of radioactive materials specifically allow for the "temporary storage" of spent fuel transportation casks incident to transportation. See 49 C.F.R. § 173.447 ("Storage incident to transportation - general requirements.").

In addition to the DOT regulations allowing temporary storage of sealed spent fuel transportation casks, the NRC general license provisions explicitly provide for "storage incident [to]" transportation. See 10 C.F.R. § 70.20a(a). The general license provisions in 10 C.F.R. § 70.20a allow "any person to possess . . . irradiated reactor fuel . . . in the regular course of carriage for another or storage incident thereto." Id. (emphasis added).

The State contends that it is necessary for the application to discuss the number of heavy haul trucks that will be available to haul casks, the mechanical reliability of these units, and their performance under all weather conditions, in order to analyze the amount of queuing and storage that will occur at Rowley Junction. State Petition at 13. However, this information is irrelevant. Even assuming that queuing of casks at Rowley Junction would result from an insufficient number of heavy duty trucks, it would not transform "storage incident" transportation as allowed under both NRC and DOT regulations into storage of spent fuel under 10 C.F.R. Part 72. It would remain subject to

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[16]This definition was reenacted into law and recodified in title 49 incident to enactment of the ICC Termination Act of 1995. This definition was carried forward from the Interstate Commerce Act, where it has long appeared.

10 C.F.R. Part 71 requirements as long as the spent fuel canister remained in the shipping casks. Thus, any queuing and temporary storage would be issue resolved under the 10 C.F.R. Part 71 requirements, and the applicable DOT requirements.

Moreover, the State has provided no factual basis for its claims of queuing. The License Application states that the "PFSF is expected to be 100 to 200 shipments of loaded spent fuel canisters annually." SAR 1.4-2. The State provides no factual basis to support queuing of transportation casks at Rowley Junction in view of this estimate.

In short, the NRC and the DOT have both set up a general license regulatory scheme that specifically allows for "storage incident" to transportation and "temporary storage during the course of transportation." 10 C.F.R. §§ 70.20a(a), 71.12; 49 C.F.R. § 173.447. The State's contention that the Rowley Junction operation will be a "spent nuclear fuel storage facility," implying the requirement to regulate the facility as a "spent nuclear fuel storage facility" under 10 C.F.R. Part 72, is in conflict with the regulations of the Commission and of DOT. The State's contention must be rejected as an impermissible challenge to the regulations of the Commission and the DOT. See 10 C.F.R. § 2.758; see also 49 C.F.R. § 106.31 (persons must petition DOT for rulemaking to establish, amend, or repeal a regulation).

d) A Stationary ITP Does Not Need to Comply with 10 C.F.R. Part 72

As set forth above, the State contends that because the intermodal transfer operation is stationary, it is important to provide the public with the regulatory protections that are afforded by compliance with 10 CFR Part 72, including a security

plan, an emergency plan, and radiation dose analyses. As discussed in the Applicant's response to subpart a) of this Contention, supra, the transportation of spent fuel, including the selection of a means of transportation, intermodal transfer of sealed transportation casks and temporary storage incident thereto, is regulated under the Commission's general license provisions in 10 C.F.R. § 71.12. See 10 C.F.R. § 71.12; see also Shoreham to Limerick Spent Fuel Shipments, DD-93-22, supra, 38 N.R.C. at 375. There is no requirement to apply for or obtain a specific license under 10 C.F.R. Part 72, or any other Commission regulations, to transport spent fuel. New Jersey, CLI-93-25, supra, 38 NRC at 294.

These regulations are based on the Commission's generic determination that 10 C.F.R. Part 71 transportation casks are adequate to protect the public health and safety during transit. Because there is no Commission requirement to obtain a specific license under 10 C.F.R. Part 72, there is no requirement to write and submit the licensing documents required under 10 C.F.R. Part 72, including a Part 72 security plan, emergency plan, and radiation dose analysis in a safety analysis report.[17] There is nothing in the Commission's regulations, nor has the State provided any basis that there

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[17] There are specific regulatory requirements for security and emergency response for spent fuel in transit. Physical security for spent fuel transportation is explicitly covered by the requirements in 10 C.F.R. § 73.37; see also 10 C.F.R. § 71.0 (requiring spent fuel transportation to meet applicable requirements of Part 73). The transportation physical security requirements must be met by the "licensee who transports, or delivers to a carrier to transport" the spent fuel, which will be the originating reactors. See 10 C.F.R. § 73.37(a) (emphasis added). Emergency planning for spent fuel transportation is provided in two ways. First, the transportation cask used to ship the spent fuel must meet the rigorous accident condition regulations in 10 C.F.R. § 71.73. Second, "each person who offers [spent fuel] for transportation," which is the originating reactors, must comply with the Department of Transportation emergency response requirements in 49 C.F.R. § 172, Subpart G for transportation of the spent fuel. See 49 C.F.R. §§ 172.1, 172.600-604.

is any, that changes the applicability of the Commission's general license provisions under 10 C.F.R. § 71.12 because the intermodal transfer operation is "stationary." The State's contention that the intermodal transfer operation must comply with the regulations in 10 C.F.R. Part 72 because it is "stationary" must be rejected both for not providing a sufficient basis to establish litigable contention, as required by 10 C.F.R. § 2.714(b), and an impermissible challenge to the regulations of the Commission in violation of 10 C.F.R. § 2.758.

C. Utah Contention C: Failure to Demonstrate Compliance with NRC Dose Limits

1. The Contention

The State alleges in Contention C that:

> The Applicant has failed to demonstrate a reasonable assurance that the dose limits specified in 10 CFR § 72.106(b) can and will be complied with.

State Petition at 16. The asserted bases for the contention are set forth in six pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its bases:

> The Applicant has failed to demonstrate a reasonable assurance that the dose limits specified in 10 CFR § 72.106(b) can and will be complied with in that:
>
> a) License Application uses data for HI-STORM and TranStor casks that have not been fully reviewed or approved by the NRC.

b) License Application erroneously states that the loss of confinement accident is not credible.

c) License Application makes selective and inappropriate use of data from SAND80-2124 for the fission product release fraction.

d) License Application makes selective and inappropriate use of data from SAND80-2124 for the respirable particulate fraction.

e) The dose analysis in the License Application only considers dose due solely to inhalation of the passing cloud. Direct radiation and ingestion of food and water are not considered in the analysis.

f) In the dose calculation, PFS appears to assume local residents will be evacuated until contamination is removed, although this is not expressly discussed in the License Application.

g) PFS fails to calculate doses to children

h) PFS uses the ICRP-30 dose model which is outdated and inadequate. PFS should be required to use the new ICRP-60 dose model.

2. Applicant's Response to the Contention

The State raises several issues under its Contention C. We address in turn below each of the specific allegations raised by the State in Contention C as set forth above.

a) Use of Unapproved Data for HI-STORM and TranStor Casks

The State alleges that the License Application is deficient because it uses data for HI-STORM and TranStor casks that "have not been fully reviewed or approved" by the NRC. See State Petition at 17-18. The State contends that the HI-STORM and TranStor cask designs "provide an inadequate basis for the SAR" because the casks have not yet

been "fully reviewed or approved by the NRC." Id. at 18. The State provides no other basis for this contention.

This contention must be rejected as an impermissible allegation concerning the NRC staff's review, rather than a contention about the adequacy of the information in the License Application. Safety Analysis Reports for both of the storage cask systems utilized by the PFSF, the HI-STORM and the TranStor, have been submitted to the NRC and are actively undergoing Staff review in parallel with this proceeding. See SAR at 4.1-1. The State's contention does not allege that any data from these Safety Analysis Reports that is used in the Applicant's license application is itself deficient. Rather the State contends that the mere use of this data is per se deficient because the Staff's review of the cask Safety Analysis Reports is not complete. See State Petition at 17-18.

The Commission has clearly stated that the basis put forth by the State is not a valid basis for an admissible contention. The Commission addressed this issue in its 1989 rulemaking amending its Rules of Practice to "raise the threshold for the admission of contentions." See 54 Fed. Reg. 33,168, 33, 171 (1989). In the Statement of Consideration for the final rulemaking, the Commission stated:

> The Commission also disagrees with the comments that § 2.714(b)(2)(iii) should permit the petitioner to show that it has a dispute with the Commission staff or that petitioners not be required to set forth facts in support of contentions until the petitioner has access to NRC reports and documents. Apart from NEPA issues, which are specifically dealt with in the rule, a contention will not be admitted if the allegation is that the NRC staff has not performed an adequate analysis. With the exception of NEPA issues, the sole focus of the hearing is on whether the application satisfies NRC regulatory requirements,

> rather than the adequacy of the NRC staff performance. See, e.g., Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-728, 17 NRC 777, 807, review declined, CLI-83-32, 18 NRC 1309 (1983). For this reason, and because the license application should include sufficient information to form a basis for contentions, we reject commenters' suggestions that intervenors not be required to set forth pertinent facts until the staff has published its FES and SER.

54 Fed. Reg. at 33,171 (emphasis added). Without additional facts, which the State does not provide to support this contention, the State's contention that the License Application is deficient because it uses data from the HI-STORM and TranStor storage casks Safety Analysis Reports that have not yet been "fully reviewed or approved by the NRC" (State Petition at 18), must be rejected for failure to provide a sufficient basis for an admissible contention under clearly-established Commission's regulations and as an impermissible challenge to Commission regulations. See 10 C.F.R. §§ 2.714(b), 2.758.

b) Loss of Confinement Accident

The State contends that the License Application's "assertion that a loss of confinement accident is not credible is contradicted by studies showing the credibility of sabotage-induced accidents which lead to loss of confinement barriers." See State Supp. Petition at 18. The State cites only one study, a study of sabotage in spent fuel transportation, to support the contention. See id. (citing Halstead and Ballard, Nuclear Waste Transportation Security and Safety Issues: The Risk of Terrorism and Sabotage Against Repository Shipments at 25 (1997) ("Halstead Report"). The State provides no other support whatsoever for this contention.

This contention must be rejected for three reasons. First, the credibility of a "loss of confinement accident" is not a material issue for this proceeding. Whether this accident is credible or not, it is addressed and analyzed in the License Application. SAR at 8.2-36 (Section 8.2.7 "Hypothetical Loss of Confinement Barrier"). In fact, this is explicitly acknowledged in the State's contention which is specifically focused on the Applicant's analysis of the "loss of confinement accident." See, e.g. State Petition at 18 (citing Section 8.2.7 of the License Application). The philosophical issue of whether this accident is credible or not is not material because the Applicant has gone ahead and addressed it regardless of its credibility. Even if the State's contention were correct, it "would not entitle [the State] to relief" because the Applicant has already analyzed this accident as though it were credible. See 10 C.F.R. § 2.714(d)(2)(ii). This contention must be rejected for failing to establish a dispute causing a material issue. 10 C.F.R. § 2.714(b).

Second, the one, and only, report cited by the State addresses sabotage of transportation casks during shipment, and not sabotage of storage casks stored at an ISFSI. See, e.g., Halstead Report at vii. The entire Halstead Report addresses only transportation of spent fuel, and provides no analysis or comment on spent fuel storage. Therefore, this contention must also be rejected for failing to provide a sufficient basis for an admissible contention. 10 C.F.R. § 2.714(b).

Third, the "sabotage-induced accidents" for spent fuel transportation developed in the Halstead Report are beyond the scope of the Commission's regulations. The Halstead Report does not cite any regulatory basis for the "sabotage-induced accident[]" scenario it

invents. See, e.g. Halstead Report at 31-49. In fact, the entire Halstead Report is a challenge to the Commission's regulations as spent fuel transportation, and was written with the purpose of "reexamin[ing] the risks of terrorism and sabotage against nuclear waste shipments" and making recommendations to the NRC to reexamine "the adequacy of the current physical protection regulations under 10 C.F.R. 73." Id. at vii, 72. Therefore, this contention must also be rejected as an impermissible collateral challenge to the Commission's regulations. 10 C.F.R. § 2.758.

c) Selective and Inappropriate Use of Data from SAND80-2124 For the Fission Product Release Fraction

The State contends that the License Application is deficient because it makes selective and inappropriate use of data from SAND80-2124 for the fission product release fraction from the spent fuel canister to the atmosphere. See State Petition at 19. Specifically, the State contends that it is inappropriate for PFS to use: (1) the NRC regulatory guidance in NUREG-1536[18] (which the State does not contest) for the initial release of radionuclides from the fuel matrix into the canister; together with (2) the data in SAND80-2124[19] for fraction of radionuclides released from the spent fuel to the canister to the atmosphere, specifically the assumption that 90% of the volatile radionuclides will not escape the canister. Id.

The State contends that it is inappropriate to use the SAND80-2124 assumption that 90% of the volatile radionuclides will not escape the canister for two reasons. First,

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[18] NUREG-1536, Standard Review Plan for Dry Cask Storage Systems (1997).
[19] SAND80-2124, Transportation Accident Scenarios for Commercial Spent Fuel, Sandia National Laboratories (1981).

the State contends it is inappropriate for PFS to use the initial release fraction from NUREG-1536 for dry cask storage, instead of the SAND80-2124 initial release fraction for transportation accidents. See id. The State does not provide any basis or rationale why it would be appropriate to use the transportation data, as the State asserts, rather than the dry cask storage data, as PFS used in its analysis, when that data is available. The NRC Staff provides data in NUREG-1536 specifically for the purpose of evaluating releases from dry storage casks. See NUREG-1536 at 7-5 to 6. The State does not provide any basis why the NRC Staff's regulatory guidance on initial release fractions for dry cask storage accidents should not be used in the PFS analysis. See State Petition at 19. The State also provides no basis why it would be preferable to use the transportation accident release data when storage-specific release data is available from the NRC. See id.

Second, the State contends it is inappropriate to use the spent fuel to canister release fraction -- the assumption that 90% of the volatile radionuclides will not escape the canister -- from SAND80-2124 because the PFS analysis is for the "static storage of dry casks" while the SAND80-2124 data is based on "high-velocity transportation accidents." See id. The State, however, does not explain why the assumption that 90% of the volatile radionuclides will not escape the canister is somehow incorrect as applied in the PFS analysis, only that it is *per se* inappropriate because it comes from a report based on spent fuel transportation accidents, rather than spent fuel storage accidents. See id. The State does not contend that the data itself, or the resulting dose calculation in the

Applicant's License Application, is in any way incorrect because of the assumption that 90% of the volatile radionuclides will not escape the canister. See id.

The Applicant's use of the assumption that 90% of the volatile radionuclides will not escape the canister from SAND80-2124 is not inconsistent with its dry storage dose analysis or its use of NUREG-1536. The Applicant used the initial release fraction from NUREG-1536 because it is explicitly provided in the NUREG. See NUREG-1567 at 7-6. However, NUREG-1567 does not provide data for the fission product release fraction from the canister to the atmosphere. Nor does the State claim that it does. NUREG-1567 does, however, explicitly reference SAND80-2124 as a basis document. See id. at 8. The Applicant's dose calculation used the fission product release fraction data from SAND80-2124 for release from the canister, since this data was not explicitly provided in NUREG-1567. This is different from the initial release fraction data, which is explicitly provided in NUREG-1567. Because NUREG-1567 does not provide the fission product release fraction data from the canister and NUREG-1567 provides SAND80-2124 as a reference document, it is reasonable and consistent for the PFS's dose analysis to use the fission product release fraction data, the assumption that 90% of the volatile radionuclides will not escape the canister, from SAND80-2124.

It is also clear that Applicant's use of data from a "high-velocity transportation accident" analysis to calculate the fission product release from an accident "involving static storage of dry casks" should be conservative and bounding for the "static" storage analysis. See State Petition at 20 (emphasis added). The "static storage" analysis has no mechanism for fission product release, while the "high-velocity transportation accident"

analysis is a high-energy event. The State's contention clearly shows that the use of the SAND80-2124 "high-velocity transportation" data should overpredict the release fraction for the "static storage" event, and its use is therefore consistent and appropriate in the PFS License Application dose analysis. The State's contention dose not address this issue.

The State's contention provides no reason why the use of the assumption that 90% of the volatile radionuclides will not escape the canister from SAND80-2124 is in any way incorrect as used in PFS's dose analysis. The State's contention must be rejected for failing to provide a sufficient basis for an admissible contention under the Commission's regulations. 10 C.F.R. § 2.714(b).

d) Selective and Inappropriate Use of Data From SAND80-2124 For The Respirable Particulate Fraction

The State contends that the License Application is deficient because it makes selective and inappropriate use of data from SAND80-2124 for the respirable particulate fraction. See State Petition at 19. Specifically, the State contends that it is inappropriate for PFS to use: (1) the NRC regulatory guidance in NUREG-1536 for the initial release fraction; together with (2) the data in SAND80-2124 for the respirable fraction of Co-60 and Sr-90, specifically the assumption that only 5% of the release fraction of Co-60 and Sr-90 will be respirable. Id. at 19-20.

The State contends that it is inappropriate to use the SAND80-2124 assumption that only 5% of the release fraction of Co-60 and Sr-90 will be respirable for two reasons. First, the State contends it is inappropriate for PFS to use the initial release fraction data

from NUREG-1536 and the SAND80-2124 data for respirable fraction of Co-60 and Sr-90. This basis is explicitly addressed under contention b), supra, where the State makes the same assertion regarding the use of the SAND80-2124 data for fission product release fraction from the canister to the astmosphere. Similar to the discussion above, the Applicant's use of the assumption that only 5% of the release fraction of Co-60 and Sr-90 will be respirable from SAND80-2124 is not inconsistent with its use of NUREG-1536. The Applicant used the initial release fraction from NUREG-1536 because it is explicitly provided in the NUREG. See NUREG-1567 at 7-6. However, NUREG-1567 does not provide data for the respirable fraction of Co-60 and Sr-90. NUREG-1567 does, however, explicitly reference SAND80-2124 as a basis document. See id. at 8. The Applicant's dose calculation used the respirable fraction of Co-60 and Sr-90 from SAND80-2124, since this data was not explicitly provided in NUREG-1567. Because NUREG-1567 does not provide the respirable fraction data, and NUREG-1567 provides SAND80-2124 as a reference document, it is reasonable and consistent for PFS to use the respirable fraction data, that only 5% of the release fraction of Co-60 and Sr-90 will be respirable, from SAND80-2124.

Second, the State contends that the use of the respirable fraction data from SAND80-2124 is inappropriate because the data is based on "a transportation accident involving impact and fire, in which some irradiated fuel will flake off in large pieces and not be respirable," rather than "an accident involving static storage of dry casks." See State Petition at 20 (emphasis added). The State's contention itself acknowledges that the storage accident is "static" and does not involve "impact and fire." See id. (emphasis

added). There is no reason, nor does the State allege there is any, to expect that the spent fuel will break into particulates at all in a "static storage" accident. The "high-velocity transportation accidents" "involving impact and fire" that are the basis of the SAND80-2124 report will provide fuel breakage and particulate generation data that is very conservative, and far envelopes fuel breakage, if any, that could be postulated for a "static" accident. The State's contention does not allege any mechanism by which fuel in a "static storage" accident would break into pieces at all. The State's contention has not addressed, nor provided any basis, for such an assumption. This contention must be rejected for failure to provide a sufficient basis to show a genuine dispute with the Applicant, as required by the Commission's regulations. 10 C.F.R. § 2.714(b)(iii).

e) Dose Calculation only Considers Dose Due to Inhalation

The State contends that the License Application is deficient because the dose analysis considers only dose "due solely to inhalation of the passing cloud." State Petition at 21 (emphasis added). The State contends that "other relevant pathways, such as direct radiation . . . and ingestion of food and water . . . are not considered, in violation of 10 CFR § 72.24(m)." Id. (emphasis added).

The first part of the State's contention, that "direct radiation" is "not considered" in the Applicant's dose analysis, and the analysis considers dose "due solely to inhalation" (see id. at 2 (emphasis added)), is mistaken and overlooks pertinent portions of the Applicant's license application. Section 8.2.7.3, "Accident Dose Calculations," of the Applicant's Safety Analysis Report states quite clearly that "[i]n addition to

inhalation dose equivalents, immersion doses were also calculated that result from exposure to radiation emitted by the radionuclides in the plume." SAR at 8.2-39. In addition to inhalation dose, the Applicant's dose analysis includes direct radiation from all radionuclides in the plume, as well as doses from tritium (H-3) absorption through the skin. See id. at 8.2-40. The State's contention does not address, or challenge the validity of, the direct radiation dose analysis in the License Application. A contention that mistakenly claims that the applicant did not address a relevant issue in the license application must be dismissed. See Section II.C supra.

The second part of the State's contention, that "ingestion of food and water" is "not considered" in the Applicant's dose analysis misconstrues the Commission's regulations and misunderstands the Applicant's dose analysis. In support of this contention, the State cites 10 C.F.R. § 72.24(m). 10 C.F.R. § 72.24(m), however, requires that:

> The calculations of individual dose equivalent or committed dose equivalent must be performed for direct exposure, inhalation, and ingestion occurring as a result of the postulated design basis event.

10 C.F.R. § 72.24(m) (emphasis added). The regulation requires the Applicant's dose analysis to consider exposure pathways that occur "as a result of the postulated design basis event." Id. The regulation does not require the analysis to include any of the three identified exposure pathways (direct radiation, inhalation, and ingestion) that do not occur in the postulated design basis event.

The Applicant's dose analysis assumes an instantaneous release (and instantaneous exposure),[20] as recommended by the NRC for a bounding dose calculation. The NRC Staff guidance in NUREG-1536 notes that for this dose analysis "the leak is assumed to be instantaneous" and then clearly states:

> Note that for an instantaneous release (and instantaneous exposure), the time that an individual remains at the controlled area boundary is not a factor in the dose calculation.

NUREG-1536 at 7-7 (emphasis added). The exposure pathway of "ingestion of food and water" does not occur instantaneously. Ingestion of food and water rather takes days or weeks to develop (time for deposition of radionuclides, collection of food and water, transportation, and consumption). The dose that occurs from ingestion during this instantaneous design basis event is zero (because the "instantaneous" postulated design basis event has no time for exposure through the ingestion pathway to develop). Therefore, for an instantaneous release and instantaneous exposure postulated design basis event, intake of radioactivity by ingestion in not a consideration. The State's contention does not address the Applicant's postulated design basis event, and does not address, or challenge the validity of the NRC guidance on evaluating postulated design events in NUREG-1536.

The "instantaneous release (and instantaneous exposure)" event recommended in NUREG-1536 is the "postulated design basis event" evaluated in the Applicant's dose

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[20] See Calculation Package Vol. II, Tab 17, "Accident λ/Qs for the Private Fuel Storage Facility ("PFSF")," SWEC Calc. No. 05996.01-UR-1 at 8; Calculation Package Vol. II, Tab 18, "Doses From Hypothetical Loss of Canister Confinement Accident," SWEC Calculation No. 05996.01-UR-2 at 7.

analysis, pursuant to 10 C.F.R. § 72.24(m). See SAR at 8.2-39 to 40. Radiation dose from "ingestion of food and water" does not "occur[] as a result of th[is] postulated design basis event." 10 C.F.R. § 72.24(m). The Commission's regulations do not require the license application to evaluate an exposure pathway (e.g., ingestion" that does not "occur[] as a result of the postulated design basis event" that the Applicant is evaluating. See id. The NRC Staff guidance for dose calculations supports this position. See NUREG-1536 at 7-7 ("time . . . is not a factor in the dose calculation . . . for an instantaneous release (and instantaneous exposure)").

A contention which "advocate[s] stricter requirements than those imposed by the regulations" is "an impermissible collateral attack on the Commission's rules" and must be rejected. See Section II.B. supra at 5-7. The State's assertion that this "instantaneous" postulated design basis event must consider ingestion, a pathway that does not occur instantaneously, runs contrary to the Commission's regulations in 10 C.F.R. § 72.24(m). The State's contention that the "instantaneous" dose analysis must include ingestion must be rejected as an impermissible challenge to the Commission's regulations. 10 C.F.R. § 2.758.

f) Dose Calculation Appears to Assume Evacuation of Local Residents

The State contends that the dose calculation in the License Application is deficient because PFS "appears to assume that local residents will be evacuated until contamination is removed, although this is not expressly discussed." See State Petition at 21 (emphasis added). There is no such assumption in the License Application dose

analyses that any local residents are evacuated following an accident at the PFSF. See generally, SAR, Chapter 8 ("Accident Analysis"). The State provides no indication of the basis for its supposition. See State Petition at 21. The State's contention provides no reference to the Applicant's License Application, nor any other support of any kind for its supposition. See id. This contention must be rejected for failing to provide a sufficient basis for an admissible contention, as required by the Commission's regulations. 10 C.F.R. § 2.714(b).

g) No Dose Calculation For Children

The State alleges that the License Application is deficient because "PFS fails to calculate doses to children, which are higher because a child's ratio of surface area to volume of organs is higher." See State Petition at 21. The State provides no regulatory basis or any other support of any kind for this assertion. See id. The Commission's regulations require the Applicant to analyze "the potential dose equivalent or committed dose equivalent to an individual outside the controlled area from accidents or natural phenomena events . . . ." 10 C.F.R. § 72.24(m).[21] The dose calculations to offsite individuals in the License Application were performed using the offsite dose calculation methodology recommended by the NRC in NUREG-1536 for releases from spent fuel storage casks and by the Environmental Protection Agency in EPA Guidance Report No. 11. See Calculation Package Vol. II, Tab 18, "Doses from Hypothetical Case of Canister Confinement Accident," SWEC Calculation No. 05996.01-UR-2; see also SAR at 8.2-37,

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[21] These analyses are included in the License Application in Chapter 8, "Accident Analysis," of the PFSF Safety Analysis Report.

8.2-39. The PFS does calculation uses an "adult breathing rate . . . in accordance with [EPA Guidance Report No. 11]." Calculation Package Vol. II, Tab 18, supra at 4, 8. The NRC guidance on offsite dose calculations in NUREG-1536 also states that:

> The staff has accepted either an adult breathing rate of 2.5×10^4 m^3/5, as specified in Regulatory Guide 1.109, or a worker breathing rate of 3.3×10^4 m^3/5, as specified in EPA Guidance Report No. 11.

NUREG-1536 at 7-7 (emphasis added). The PFS dose calculation used the higher of two NRC recommended adult breathing rates. See SAR at 8.2-39. NUREG-1536 also directs that:

> Dose conversion factors for inhalation, whole body dose, and thyroid dose should be equivalent to those indicated in EPA Guidance Report No. 11.

Id. EPA's guidance on dose conversion factors in EPA Guidance Report No. 11 only provides dose conversion factors for adults, and does not include dose conversion factors for children. See Environmental Protection Agency, Federal Guidance Report No. 11, "Limiting Values of Radionuclide Intake and Air Concentration and Dose Conversion Factors for Inhalation, Submersion, and Ingestion," DE89-011065 (1988) (cited in SAR at 8.2-39; Calculation Package Vol. II, Tab 18 at 4, 8; NUREG-1536 at 7-7, 7-9). The State's contention does not address or challenge the validity of the NRC and EPA guidance on performing offsite dose calculations for releases from dry storage casks. See State Petition at 21. The State has provided no regulatory support for its assertion. The State's contention must be rejected because it fails to provide a sufficient basis to

challenge the License Application dose calculations and the NRC and EPA dose calculation assumptions. See 10 C.F.R. § 2.714(b).

h) Use of ICRP-30 Dose Model

As set forth above, the State alleges that the License Application is deficient because PFS uses the ICRP-30 dose model which is outdated and inadequate. See State Petition at 21. The State alleges that "PFS should be required to use the ICRP-60 dose model." Id. (emphasis added). The State does not address this contention any further except to assert that the ICRP-30 model is "outdated" and "inadequate," and the ICRP-60 model is "more accurate" and "correctly calculates doses to children." See id. The State provides no factual support and no regulatory support whatsoever for this contention.

The State's contention that PFS's use of ICRP-30 is inadequate and PFS "should be required" to use ICRP-60 must be rejected for failing to provide a sufficient basis for an admissible contention. 10 C.F.R. § 2.714(b).[22]

D. Utah Contention D: Facilitation of Decommissioning

1. The Contention

The State alleges in Contention D that:

> The proposed ISFSI is not adequately designed to facilitate decommissioning, because PFS has not provided sufficient information about the design of its storage casks to assure

[22] The NRC Staff Standard Review Plan for Dry Cask Storage Systems recommends the use of dose conversion factors based on the ICRP-30 dose model, as used in the Applicant's license application. The NRC Standard Review plan states that "[d]ose conversion factors for inhalation, whole body dose, and thyroid dose should be equivalent to those indicated in EPA Guidance Report No. 11. NUREG-1536, Standard Review Plan for Dry Cask Storage Systems 7-7 (1997) (section 7.4, "Confinement Analyses").

> compatibility with DOE repository specifications. Moreover, in the reasonably likely event that PFS's casks do not conform to DOE specification, PFS fails to provide any measures for the repackaging of spent fuel for ultimate disposal in a high level radioactive waste repository. Moreover, PFS provides no measures for verification of whether the condition of spent fuel will meet the disposal criteria that DOE may impose.

State Petition at 22. The asserted bases for the contention are set forth in five pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated incorporating the specific allegations in its bases as indicated below.

> The proposed ISFSI is not adequately designed to facilitate decommissioning, because PFS has not provided sufficient information about the design of its storage casks to assure compatibility with DOE repository specifications. Moreover, in the reasonably likely event that PFS's casks do not conform to DOE specification, PFS fails to provide any measures for the repackaging of spent fuel for ultimate disposal in a high level radioactive waste repository. Moreover, PFS provides no measures for verification of whether the condition of spent fuel will meet the disposal criteria that DOE may impose.
>
> a) The Applicant's spent fuel casks are not adequately designed for decommissioning because the applications do not adequately address potential DOE criteria for the acceptance of spent fuel currently under development, and in fact they may be incompatible with such criteria.
>
> b) The Applicant has no means, such as a hot cell, to inspect its spent fuel canisters, yet DOE may require reopening of the canisters for inspection to ensure that the fuel falls within acceptance limits on the physical state of irradiated fuel that DOE may establish. Moreover, 10 C.F.R. § 70.122(h) requires the applicant to have some means of inspecting the interior of the spent fuel canisters so that fuel degradation will not

pose a safety problem during removal of the fuel from storage.

c) The Applicant's ISFSI must have a hot cell for transferring spent fuel to casks compatible with DOE requirements; it is unrealistic to rely on reactors (as late as 2063) or the DOE facility at Yucca Mountain to perform such a function.

d) The Applicant's ISFSI must have a hot cell for fuel repackaging because degraded fuel should not be shipped from the ISFSI as it increases the risk of accidents during transportation; therefore, it is reasonable to expect DOE to require repackaging.

2. Applicant's Response to the Contention

The State raises a number of issues under Contention D, which we address in turn below.

a) Cask System Design and DOE Spent Fuel Acceptance Criteria

The State asserts that the Applicant's spent fuel casks are not adequately designed for decommissioning because the applications do not adequately address potential DOE criteria for the acceptance of spent fuel currently under development and in fact they may be incompatible with such criteria. State Petition at 22-24 (citing 10 C.F.R. § 72.130; Reg. Guide 3.48; DOE Office of Civilian Radioactive Waste Management, Multi-Purpose Canister (MPC) Implementation Program, Conceptual Design Report, Volume I - MPC Conceptual Design Summary Report (Final Draft: September 30, 1993)).

First, this subcontention is inadmissible because, contrary to the State's claim, the Applicant's spent fuel cask designs do address potential DOE spent fuel acceptance criteria to the extent that these are available. See SAR at 1.3-1; LA Appendix B at 1-1.

Thus the subcontention mistakenly claims that the Applicant failed to address a relevant issue in the application. See Section II.C.2 supra.

The Applicant selected its canister-based fuel cask design in part because "[it] is expected to be compatible with the final DOE system for spent fuel management." SAR at 1.3-1; see also, LA Appendix B at 1-1 ("canisters are designed to meet DOE guidance applicable to multi-purpose canisters for . . . disposal of spent fuel"). In fact, the SAR cites DOE's determination that a canister-based system is most suitable for handling, transporting, storing, and disposing of spent nuclear fuel. Id. (citing U.S. Department of Energy Civilian Radioactive Waste Management, Multi-Purpose Canister System Evaluation, DOE/RW-0445 (September 1994)). The canister system offers the most integrated approach in that it allows one-time packaging of fuel for all phases of transportation, storage, and disposal. Multi-Purpose Canister System Evaluation at 7-1. Thus the Applicant has addressed spent fuel acceptance to the extent that DOE has identified a suitable cask design. The State's assertions ignore plain statements in the application and this subcontention should be dismissed.

Second, this subcontention should also be dismissed because the document the State cites as its basis does not support the point for which it is urged. See Section II.C.1 supra at 14. The State's Exhibit 4, the MPC Conceptual Design Summary Report, cited in State Petition at 24, actually supports the Applicant's analysis because it concludes that a multipurpose canister ("MPC") is "a viable option for waste acceptance, storage,

transportation, and disposal" of fuel.[23] MPC Conceptual Design Summary Report at 1.xiv. The State does not identify any cask design aspect in either State Exhibit 4 or elsewhere that the Applicant did not consider.

Third, this subcontention must be dismissed because its assertion that the Applicant's spent fuel cask systems are not adequately designed for decommissioning because they may in fact be incompatible with potential DOE spent fuel acceptance criteria is wholly speculative: it does not provide "[s]ufficient information . . . to show that a genuine dispute exists with the applicant on a material issue of law or fact." 10 C.F.R. § 2.714(b)(2)(iii). Cask designs should take into account the transportation and ultimate disposal of spent fuel by DOE "to the extent practicable." 55 Fed. Reg. 29,181, 29,187 (1990) (Statements of Consideration, Storage of Spent Fuel in NRC-Approved Storage Casks at Power Reactor Sites); see 10 C.F.R. § 72.130. "However, specific criteria for designing spent fuel storage casks for compatibility may not be available until the design for a high-level waste repository is complete." 55 Fed. Reg. at 29,187. While the State speculates as to what they might ultimately be, it admits that "DOE has not yet issued its design criteria." State Petition at 24. Even potential or considered criteria are subject to change such that it is impossible to design a spent fuel cask system today that is sure to be compatible with the ultimate regulation. In any event, there is no current

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[23] DOE has recently confirmed this conclusion: its recently developed interim spent fuel storage facility design utilizes storage systems from six vendors, including both of the cask systems the Applicant intends to use at its ISFSI. Department of Energy, Centralized Interim Storage Facility, Topical Safety Analysis Report at 1.1-1 (May 1997).

requirement and thus no dispute exists with the Applicant on a material issue of law or fact. 10 C.F.R. § 2.714(b)(2)(iii).

For the reasons cited above, this subcontention must be dismissed.

3. Inspection of Spent Fuel

The State alleges that the Applicant has not designed its ISFSI for decommissioning because it has no means, such as a hot cell, to inspect its spent fuel canisters; yet, DOE may require reopening of the canisters for inspection to ensure that the fuel falls within acceptance limits on the physical state of irradiated fuel that DOE may establish. State Petition at 24-25. Moreover, the State contends that the Applicant must have some means for inspecting the interior of its spent fuel canisters to comply with the 10 C.F.R. § 72.122(h) requirement that an ISFSI licensee confine spent fuel so that degradation will not pose operational safety problems with respect to its removal from storage. Id. at 24.

This subcontention must be dismissed as "an impermissible collateral attack on the Commission's rules" for "advocat[ing] stricter requirements than those imposed by the regulations." See Section II.B. supra at 5-7. Contrary to the State's assertion, a hot cell is not necessary to inspect the spent fuel to ensure compatibility with DOE spent fuel acceptance limits, because DOE is required to take spent fuel irrespective of its state of degradation. See Standard Contract for Disposal of Spent Nuclear Fuel and/or High-Level Radioactive Waste, 10 C.F.R. Part 961. Under the Standard Contract and related DOE regulations, DOE must take the fuel so long as it meets the criteria specified in

Appendix E to Part 961. 10 C.F.R. Part 961.11, Article VI—Criteria For Disposal. Appendix E sets maximum nominal physical dimensions for the fuel but specifically provides for the acceptance of "previously encapsulated fuel," including "failed fuel." 10 C.F.R. Part 961, Appendix E. It further provides that "previously encapsulated fuel" need not be visually inspected prior to transfer to DOE; the transferring party need merely advise DOE of the reason for the prior encapsulation so that DOE may plan for its subsequent handling. Id. Thus the Applicant does not need a hot cell at its ISFSI to ensure the compatibility of the spent fuel with DOE acceptance criteria and this subcontention must be dismissed as "an impermissible collateral attack on the Commission's rules." Seabrook, LBP-82-106, 16 NRC at 1656.

Similarly, the claim that 10 C.F.R. § 72.122(h) requires the Applicant to have a hot cell for inspecting its spent fuel to ensure that fuel degradation will not pose operational safety problems regarding its removal from storage must also be dismissed as an impermissible collateral attack on NRC rules for advocating stricter requirements than they impose. Seabrook, LBP-82-106, 16 NRC at 1656. The NRC has determined that with spent fuel cask systems, like the Applicant's, designed with helium-filled, double-seal welded canisters, inspection of the spent fuel is not necessary to protect the public health and safety. See 59 Fed. Reg. 65,898, 65,902 (1994) (Addition to List of Approved Spent Fuel Storage Casks, Statement of Considerations) (discussing the NUHOMS spent fuel canister); see also 58 Fed. Reg. 17,948, 17,954 (1993) (Addition to List of Approved Spent Fuel Storage Casks, Statement of Considerations) (discussing the VSC-24 canister). The State has made no claims under 10 C.F.R. § 2.758 that these NRC

positions should not apply here. Accordingly, the State's attack is impermissible in this individual licensing proceeding. This point is discussed further in Applicant's response to the State's Contention J.

4. Transfer of Spent Fuel to DOE Casks

The State claims that the Applicant's proposed ISFSI must have a hot cell for transferring spent fuel to casks compatible with DOE requirements because it is unrealistic to rely on reactors (as late as 2063) or the future DOE facility at Yucca Mountain to perform such a function. State Petition at 25-26.

First, this subcontention should be dismissed as an impermissible collateral attack on NRC rules for advocating stricter requirements than they impose. NRC regulations do not require an ISFSI to have the capability to repackage spent fuel. See 10 C.F.R. § 72.3 (defining ISFSI and monitored retrievable storage ("MRS") installation). Part 72.3 defines an ISFSI as a facility "for the interim storage of spent nuclear fuel" and associated radioactive materials. Id. It defines an MRS as an installation for the "transfer, handling, packaging, . . . and storage of spent nuclear fuel and . . . high-level radioactive waste." Id. In fact, Part 72 imposes more stringent emergency planning requirements on an MRS than an ISFSI because the fuel repackaging and handling operations at the MRS entail greater risk. 58 Fed. Reg. 29,795, 29,797 (1993) (Part 72, Proposed Rules); compare 10 C.F.R. § 72.32(a) with § 73.32(b).

Furthermore, the Standard Contract for Disposal of Spent Nuclear Fuel under which DOE will accept fuel from the Applicant's ISFSI for disposal, requires DOE to

accept "previously encapsulated fuel" from the Applicant so long as the Applicant advises DOE of the reason for the prior encapsulation so that DOE may plan for its subsequent handling. 10 C.F.R. § 961.11, Article VI, Appendix E. Thus there is no need for the Applicant to repackage fuel at the ISFSI. Indeed, the State's Exhibit 4, MPC Conceptual Design Summary Report, states that "[i]f the MPC design turns out to be incompatible with the desired thermal loading strategy, then the SNF (spent nuclear fuel) can be repackaged at the repository." MPC Conceptual Design Summary Report at I.6-4. Hence, this subcontention should be dismissed as an impermissible collateral attack on NRC rules for advocating stricter requirements than they impose. Seabrook, LBP-82-106, 16 NRC at 1656.

Second, this subcontention should be dismissed because it provides neither facts nor expert opinion, or sources to establish facts or opinion to support it. 10 C.F.R. § 2.714(b)(2)(ii). The State asserts that the Applicant must be required to repackage its spent fuel at the ISFSI because "there is no reason to believe that the Yucca Mountain facility [DOE repository] will be equipped with the necessary equipment" to do so. State Petition at 26. Yet the State provides no supporting material whatsoever to indicate that its assertion is true. See id. Indeed, the State's own Exhibit 4 provides information to the contrary -- that DOE will have the capability to repackage canisters at the facility. Thus, the subcontention must be dismissed. 10 C.F.R. § 2.714(b)(2)(ii); Vermont Yankee, ALAB-919, 30 NRC at 48; MPC Conceptual Design Summary Report at I.6-2, I.6-4.

5. Shipping of Degraded Fuel

The State asserts that the Applicant's proposed ISFSI must have a hot cell for fuel repackaging because degraded fuel should not be shipped from the ISFSI. State Petition at 26. According to the State, degraded fuel increases the risk of accidents during transportation and it is "far more reasonable" for DOE to require potential repository users to repackage their waste before shipping it to the repository. Id.

This subcontention should be dismissed because 1) the transportation of spent fuel is outside the scope of this hearing; 2) the subcontention advocates stricter requirements than NRC regulations impose; and 3) it is not supported by adequate bases.

As discussed in Section II.B. above, contentions are not cognizable unless they are material to a matter that falls within the scope of the proceeding for which the licensing board has been delegated jurisdiction as set forth in the Commission's Notice of Opportunity for Hearing. The Notice of Opportunity for Hearing in this case delineates the scope of the present licensing proceeding to include only the consideration of "an application . . . for a materials license, under the provisions of 10 C.F.R. part 72, . . . to possess spent fuel and other radioactive materials associated with spent fuel storage in an [ISFSI] located on the Skull Valley Goshute Indian Reservation . . . ." 62 Fed. Reg. 41,099 (1997) (Notice of Opportunity for Hearing). While ISFSIs are licensed under Part 72, the transportation of spent fuel is governed by Part 71 and other provisions, but not Part 72. 10 C.F.R. § 71.0. Thus, this subcontention must be rejected as beyond the scope of the hearing.

Second, this subcontention should be dismissed as an impermissible collateral attack on NRC rules for advocating stricter requirements than they impose. Seabrook, LBP-82-106, 16 NRC at 1656. Once the spent fuel has been sealed in a canister such as the ones the Applicant plans to use at its ISFSI, NRC regulations place no limit on the shipment of spent fuel based on its potential degradation. See 51 Fed. Reg. 19,106, 19,108 (1986) (Part 72, Proposed Rules). In fact, once spent fuel is sealed inside a helium-filled canister with a double-seal weld, the way it will be in the Applicant's canisters, the Applicant need not maintain the integrity of the spent fuel cladding at all. Id. Once it is sealed, the canister acts as a replacement barrier in lieu of the potentially degraded cladding. Id.; see also e.g., 59 Fed. Reg. at 65,901 (discussing the NUHOMS spent fuel canister). Thus there are no limits on the shipment of such canisters. Therefore, this contention must be dismissed as an impermissible collateral attack on NRC regulations for advocating stricter requirements than they actually impose.

Third, to the extent that it asserts that the shipment of degraded fuel increases the risk of accidents during transportation and that "[i]t is far more reasonable for the DOE to require all potential users of the repository to properly package their waste before shipping . . . " (State Petition at 26), this subcontention should be dismissed as unsupported by alleged facts or expert opinion, or specific sources on which petitioner intends to rely to establish such facts or expert opinion. 10 C.F.R. § 2.714(b)(2)(ii). The State has supplied nothing to support a transportation accident scenario or the likelihood that DOE will in fact require utilities to repackage their spent fuel before shipping it to a repository.

E. Utah Contention E: Financial Assurance

1. The Contention

The State alleges in its Contention E that:

> Contrary to the requirements of 10 C.F.R. §§ 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.

See State Petition at 27. The State argues as a matter of law that the financial qualification requirements of 10 C.F.R. Part 72 are the same as those for 10 C.F.R. Part 50 and that accordingly "it is appropriate to apply the Part 50 standards to PFS." Id. Based on its view that Part 50 requirements apply, a view which is erroneous as discussed below, the State sets forth eight respects in which it claims that the information submitted by the Applicant to demonstrate its financial qualifications is deficient. See State Petition at 31-38. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows:

> Contrary to the requirements of 10 C.F.R. §§ 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:
>
> a) The information in the application about the legal and financial relationship among the owners of the limited liability company (i.e., the license Applicant PFS) is deficient because the owners are not explicitly identified, nor are their relationships discussed, as required by 10 C.F.R. §§ 50.33(c)(2) and 50.33(f) and Appendix C, § II of 10 C.F.R. Part 50.
>
> b) The applicant must submit as part of the license application a current statement of assets, liabilities and capital structure, see 10 C.F.R. Part 50 Appendix C, § II.

c) The Applicant does not take into account the difficulty of allocating financial responsibility and liability among the owners of the spent fuel nor does it address its financial responsibility as the "possessor" of the spent fuel casks.

d) The Applicant has failed to show that it has the necessary funds to cover the estimated costs of construction and operation of the proposed ISFSI because its costs estimates are vague and generalized and do not satisfy requirements of 10 C.F.R. Part 50, App. C, § II.

e) The Applicant must submit copy of each Subscription Agreement pursuant to 10 C.F.R. Part 50, App. C., § II and must generally document its funding sources.

f) The Applicant must document an existing market for the storage of spent nuclear fuel and the commitment of sufficient number of Service Agreements to fully fund construction of the proposed ISFSI. The Applicant has not shown that the commitment of 15,000 MTUs is sufficient to fund the Facility including operation, decommissioning and contingencies.

g) Debt financing is not a viable option to finance construction costs until a minimum number of Service Agreements are committed and submitted.

h) The Application does not address funding contingencies to cover on-going operations and maintenance costs in the event an entity storing spent fuel at the proposed ISFSI breaches the service agreement or becomes insolvent.

2. Applicant's Response to the State's Asserted Legal Basis

The State argues that, because the financial qualification requirements in 10 C.F.R. Part 72 are very general, 10 C.F.R. Part 50 requirements should be applied in determining financial qualifications under 10 C.F.R. Part 72. State Petition at 27-31. In support of this proposition, the State relies on the licensing board's decision in Louisiana

Energy Services L.P. (Claiborne Enrichment Center), LBP-96-25, 44 NRC 331 (1996) ("LES") in which the board determined that it was required to apply 10 C.F.R. Part 50 financial qualifications criteria in determining the financial qualifications of an applicant under 10 C.F.R. Part 70.

The State's reliance on the licensing board's LES decision is now inappropriate. That decision has been reversed by the Commission in a ruling which wholly rejected the licensing board's analysis. Louisiana Energy Services, L.P., CLI-97-15, slip op. (December 18, 1997). The Commission concluded that the language and history of Part 70 and the Commission order establishing the LES proceeding "compel the opposite result" from that reached by the licensing board. Id. at 6. Nor does the reasoning underlying the licensing board's discredited ruling apply to the Part 72 proceeding here. The board in LES placed great emphasis on its view that the financial requirements of 10 C.F.R. Parts 50 and 70 had begun initially as twins. Therefore, the board reasoned that subsequent detail added to the 10 C.F.R. Part 50 requirements could be applied to 10 C.F.R. Part 70 applicants as well. Here, however, unlike the financial requirements of Part 70, the financial qualification requirements of 10 C.F.R. Part 72 did not begin essentially as a twin of the requirements of Part 50, but were promulgated close to 15 years after the Part 50 requirements. The Commission did not see fit to include or incorporate the more detailed financial requirements of 10 C.F.R. Part 50 into the 10 C.F.R. Part 72 regulations when the latter were promulgated in 1980. The Commission was obviously aware of the financial qualification provisions of 10 C.F.R. Part 50 and could have included those provisions had it seen fit. Its failure to do so, therefore, must

be taken as clear intent that the more detailed provisions of 10 C.F.R. Part 50 are not applicable to applicants under 10 C.F.R. Part 72.

In the past, when the Commission has intended the provisions of one part of its regulations to be identical or nearly identical to those of another part, it has manifested that intent. With respect to Parts 72 and 50, for example, the requirements for providing reasonable assurance of decommissioning funding of Part 72 and Part 50 are worded very similarly. Compare 10 C.F.R. §§ 72.30(c) with 50.75(e). Those regulations were promulgated simultaneously. See 53 Fed. Reg. 24,018, 24,039-40 (1988). In the area of safety, the quality assurance criteria pertaining to reactors under Part 50 and ISFSIs under Part 72 are worded almost identically. Compare 10 C.F.R. §§ 50, App. B with 72.142-176. Those regulations, however, were promulgated separately. See 51 Fed. Reg. 19,106, 19,108 (1986). The former QA criteria of Part 72 incorporated the QA criteria of Part 50, Appendix B, by express reference. Id. Thus, because the financial assurance regulations of Part 72 do not expressly impose the same requirements as the financial assurance regulations of Part 50, the Board should not infer that the requirements of Part 72 are the same as those of Part 50. In fact, the contrary inference follows.

There was good reason for the Commission not to incorporate the more detailed requirements of 10 C.F.R. Part 50 into the financial of qualification requirements for 10 C.F.R. Part 72. The nature of the activities regulated under 10 C.F.R. Part 50 differ markedly in kind from those regulated under 10 C.F.R. Part 72. As stated by the Commission in the Statement of Considerations for 10 C.F.R. Part 72 in responding to

comments on its observation that the extended storage of spent fuel is "a low risk operation."

> Once in place, spent fuel storage is a static operation and during normal operations the conditions required for the release and dispersal of significant quantities of radioactive materials are not present. There are no high temperatures or pressures present during normal operations or under design basis accident conditions to cause the release and dispersal of radioactive materials. This is primarily due to the low heat generation rate of spent fuel with more than one year of decay before storage in an ISFSI required by the rule and with the low inventory of volatile radioactive materials readily available for release to the environs.

45 Fed. Reg. 74,693, 74,694 (1980). This statement was given in the context of facility safety and risk, which must be the fundamental underpinning of any financial qualification requirements promulgated by the NRC, whose jurisdiction under the Atomic Energy Act is limited to health and safety.

In short, the applicable financial qualification requirements are those set forth in 10 C.F.R. Part 72, not 10 C.F.R. Part 50, as argued by the State. The financial qualification regulations in Part 72 require an applicant to provide information which shows that:

> [it] either possesses the necessary funds, <u>or that the applicant has reasonable assurance of obtaining the necessary funds</u>; or that by a combination of the two, the applicant will have the necessary funds available to cover the following:
>
> (1) Estimated construction costs;
>
> (2) Estimated operating costs over the planned life of the ISFSI . . . .

10 C.F.R. § 72.22(e). (emphasis added). The Commission in Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), CLI-78-1, 7 NRC 1, 19, aff'd sub nom, New England Coalition on Nuclear Pollution v. NRC, 582 F.2d 87 (1st Cir. 1978) has spoken to what constitutes "reasonable assurance" in the context of financial qualifications. The Commission stated there as follows:

> "[R]easonable assurance" does not mean a demonstration of near certainty that an applicant will never be pressed for funds in the course of construction. It does mean that the applicant must have a reasonable financing plan in the light of relevant circumstances.

7 NRC at 18 (emphasis added). In a similar vein the Commission has recently recognized in the context of decommissioning that the reasonable assurance standard does not require "an absolute guarantee of such funds." Yankee Atomic Electric Company, (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 262 (1996) ("Yankee Atomic I").

Thus, the legal standard applicable in evaluating the admissibility of contentions challenging Applicant's financing qualifications is whether PFS has a "reasonable financing plan" for obtaining the necessary funds for the construction and operation of the PFSF.

3. Applicant's Response to the State's Specific Contentions

a) Legal and Financial Relationship Among Owners of PFS

The State asserts that the information in the application about the legal and financial relationship among the owners of PFS "is appallingly deficient" in that the

"owners are not explicitly identified, nor are their relationships discussed, as required by 10 C.F.R. §§ 50.33(c)(2) and 50.33(f) and Appendix C, § II" of 10 C.F.R. Part 50. State Petition at 32. As discussed above, however, the financial qualification requirements of 10 C.F.R. Part 50 do not apply to applicants under 10 C.F.R. Part 72. There is no requirement in 10 C.F.R. Part 72 that the owner of a proposed ISFSI disclose its shareholders or owners or describe the legal relationship among them. Accordingly, this sub-contention must be dismissed as advocat[ing] stricter requirements than those imposed by the regulations and therefore constituting an impermissible collateral attack on the Commission's rules." See Section II.B. supra at 5-7.

Moreover, this subcontention must be dismissed because it does not provide any basis to show that the alleged deficiency will result in a lack of reasonable assurance of the Applicant obtaining the funds necessary to cover the construction and operation of the PFSF. With respect to decommissioning, a petitioner challenging the adequacy of decommissioning funding or the decommissioning plan funding must do more than assert deficiencies in the plan or its estimates. Rather, petitioners must show "some specific link between the alleged errors in the plan and the health and safety impacts they invoke." Yankee Atomic I, CLI-96-7, 43 NRC at 258. Thus, for example, challenges to the reasonableness of an applicant's decommissioning cost estimates are not admissible unless the petitioner shows that "there is not reasonable assurance that the amount will be paid." Yankee Atomic Electric Company (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1, 9 (1996) ("Yankee Atomic III"). Without such a showing, the only relief available would be "the formalistic redraft of the plan with a new estimate." Id., at 9.

The same rationale would apply equally to challenges to the reasonable assurance of obtaining funds for construction and operation. A petitioner must show that its contentions have some health and safety significance, or else the Commission would be engaged in merely requiring additional information or analysis of no health and safety significance. See Yankee Atomic III, CLI-96-1, 43 NRC at 9. Here, the State merely seeks additional information without establishing any basis for its significance and thus the contention must be rejected.

b) Failure to Submit Current Statement Assets, Liabilities, and Capital Structure

The State contends that

> [a]s part of the Applicant's demonstration of financial qualifications, the Applicant must be required to submit a current statement of its assets, liabilities, and capital structure. See 10 C.F.R. Part 50, App. C. II.

State Petition at 32.

Again, because the requirements of 10 C.F.R. Part 50 are not applicable here, this contention must likewise be dismissed. 10 C.F.R. Part 72 does not require the submittal of an Applicant's "current statement of its assets, liabilities and capital structure," and therefore this contention, as that in subpart a above, is an impermissible challenge to agency regulations.

c) Financial Responsibility for Releases of Nuclear Materials

The State also contends that PFS has not taken into account the difficulty of allocating financial responsibility when casks are centrally stored and owned by different

entities, and fails to "address its financial responsibility as the 'possessor' of spent fuel casks." State Petition at 32-33. The underpinning of this contention seems to be that the storage of spent fuel owned by a myriad of licensees at a single location will result in a complex and unworkable liability scheme for allocating liability for an accident involving nuclear materials or a spill or release of nuclear materials.

The State has failed, however, to provide any basis for its assertion that the storage of spent fuel by a number of licenses at a single location will result in a complex and unworkable scheme of liability. Under the Commission's amended pleading requirements it must "provide a basis of alleged facts or expert opinions, together with references to specific sources and documents that establish those facts or opinions." Yankee Atomic I, supra, CLI-96-7, 43 NRC at 248-49. Neither the contention nor the affidavit of Lawrence White referenced as support for the contention provide any such basis. Indeed, the State's contention ignores the fact that numerous licensees have been storing spent fuel for years at the same location in the Morris, Illinois General Electric Morris Operation facility.

Further, the State has failed to set forth any basis for a credible accident involving the storage of materials at the proposed ISFSI, or the spill and release of nuclear materials. The State is obligated to provide the technical analyses and expert opinion or other information showing why its asserted factual bases support its contention. Where a petitioner has failed to do so, the Board may not make factual inferences on the petitioner's behalf. "[W]hen a postulated accident scenario provides the premise for a contention, a causative mechanism for the accident must be described and some credible

basis for it must be provided." Vermont Yankee Nuclear Power Corporation (Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29, 44 (1989), vacated in part on other grounds and remanded, CLI-90-4, 31 NRC 333 (1990). Here the State fails to do that. It simply asserts "[t]he potential for accidents given the surrounding hazardous military activities is not unconsequential." State Petition at 33. Such a bold conclusory allegation is insufficient to admit a contention. Texas Utilities Electric Company (Comanche Peak Steam Electric Station, Unit 2), LBP-92-37, 36 NRC 370, 376.[24] Therefore, there is no factual basis for the contention as required by 10 C.F.R. § 2.714(b)(2)(ii) and it must be dismissed.

d) Vague and Generalized Cost Estimates

The State contends that the Applicant has failed to show that it has the necessary funds to cover the estimated costs of construction and operation of the proposed ISFSI because its costs estimates are "vague and generalized" and do not "satisfy 10 C.F.R. Part 50, App. C. § II, which requires that construction costs must be itemized by categories of cost in sufficient detail to permit an evaluation of its reasonableness." State Petition at 34.

Again, this contention must be dismissed because the requirements of 10 C.F.R. Part 50 are not applicable here. Therefore, the State cannot rely on those provisions to say that the license application is deficient and this contention should be dismissed as an impermissible challenge to the Commission's regulations.

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[24] As discussed further in response to State Contention K, the State has not provided any admissible contention with respect to the surrounding military activities.

The State therefore cannot merely assert that the regulations require more information. Rather, it must provide a basis of alleged facts or expert opinions, together with references to specific sources and documents that establish those facts or expert opinions. It must provide some factual basis for its claim that applicant's estimates are not reasonable other than the bald assertion that they are inadequate. Moreover, it must show some indication that the alleged inadequacy of the cost estimates will result in an actual shortfall of funds needed for construction or operation of the PFSF. See Section II.C. at 11.

The State has failed to do so here. The only attempt at a sufficient factual basis provided by the State in the contention or the referenced affidavit of Lawrence White is a reference to a 1993 DOE estimate for a monitored retrievable storage ("MRS") installation. State Petition at 35. However, as discussed in more detail elsewhere in this Response, an MRS is an entirely different type of structure than the ISFSI proposed by PFS. An MRS, unlike Applicant's proposed ISFSI, handles and packages spent fuel. Thus, it has various systems and features which the proposed PFSF will not have, such as a hot cell with remote handling equipment for removing and repackaging bare spent fuel. Further, it is totally unclear from Exhibit 6 to the State's Petition whether the State in its petition is comparing similar categories of costs. Thus, the document does not provide any basis for this subcontention and it must be dismissed.

e) Applicant Must Submit Copy of Subscription Agreements or Similar Documentation

The State contends that Applicant must submit as part of the license application pertinent portions of the subscriptions agreements under which each of the eight members of PFS will make equity contributions of $6 million each, for a total of $48 million for the construction of the PFSF. As authority for this proposition, the State cites 10 C.F.R. Part 50, Appendix C, II. State Petition at 36. However, as already discussed, 10 C.F.R. Part 50 requirements do not apply here and therefore this subcontention must be dismissed as an impermissible attack on Commission rules.

The State cannot merely assert providing such information is required by the applicable regulations. As with respect to subparts a-d above, it must provide a basis of alleged facts or expert opinions, with references to specific sources of documents as well as some indication how the alleged lack of information adversely affects whether Applicant has put forward a reasonable financing plan for the project -- the applicable legal standard under the Commission's decision in Seabrook. The State has completely failed to do so, resting instead on bald conclusory allegations which are insufficient for the admission of a contention. Texas Utilities, supra.

f) Service Agreements

As stated in the License Application, PFS intends to fund the bulk of the construction costs of the facility through Service Agreements with customers. The payments under each Service Agreement will be spread over the period of construction through delivery of the spent fuel. No construction will proceed until Service

Agreements committing for a significant quantity of spent fuel have been signed. The nominal target of storage commitments for the initiation of construction is 15,000 MTU. LA at 1-5.

The State contends, however, that to demonstrate reasonable assurance the Applicant cannot "simply identify a mechanism for obtaining funds" but must document an existing market and "the commitment of a sufficient number of service agreements to fully fund construction of the facility." State Petition at 37. The State also contends that the Applicant has not substantiated that a storage commitment of 15,000 MTUs would be adequate to fund construction.

This contention is precisely the same as that rejected by the Commission in its LES decision, CLI-97-15, slip op. at 15-21. It must be rejected here for the same reasons. Moreover, this subcontention must be dismissed as an impermissible challenge to agency regulations and for lack of basis. The Commission regulations providing for reasonable assurance of funding do not require "an absolute guarantee" or even a "near certainty" of such funds. Yankee Atomic I, CLI-96-7, 43 NRC at 262, supra; Seabrook, supra. They only require an applicant to provide a "reasonable financing plan." Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), DD-79-20, 10 NRC 703, 706 (1979). The State's call for actual commitments in place therefore "advocate[s] stricter requirements than imposed by the regulations" and is "an impermissible collateral attack on the Commission's rules." Seabrook, LBP-82-106, 16 NRC at 1656. Similarly, the State's contention that the Applicant must document an existing market seeks to impose stricter requirements than by Commission rule.

Finally, the State has provided no basis for claiming that 15,000 MTUs may not be sufficient for construction to proceed. The State has set forth no factual basis to support an assertion that storage commitments for 15,000 MTUs will result in a lack of reasonable assurance that PFS will be able to obtain the necessary funds to construct the proposed ISFSI, as required by the amended rules of practice and the Commission's decision in Yankee Atomic III, CLI-96-1, 43 NRC at 9.

g) Debt Financing

Although the use of Service Agreements will allow PFS to avoid financing costs for construction, the License Application notes that PFS retains the option to finance the non-equity portion of the construction costs through debt financing secured by the Service Agreements. LA at 1-6. The State in this subcontention asserts debt financing will not be viable until a minimum value of service agreements is committed and the Applicant has provided supporting documentation, including the service agreements, neither of which has been accomplished or done. Accordingly, the State claims the Applicant has failed to show that it has reasonable assurance of obtaining funding through debt financing. State Petition at 37. This subcontention, as that in subpart f above, must be rejected as an impermissible collateral attack on the Commission's regulation by seeking to impose stricter requirements -- an absolute guarantee of funding -- than that required by Commission regulations. See LES, CLI-97-15, supra. Moreover, as above, the State has provided no factual basis for its assertion.

h) Funding Contingencies

The State's last subcontention is that although "the Applicant states that it will require financial information from its 'customers,'" the Application "has not addressed funding contingencies" to cover on-going operations and maintenance costs in the event an entity storing spent fuel "breaches the service agreement or becomes insolvent." State Petition at 38. Speculation that an entity will go bankrupt or default on an obligation, however, is not sufficient to admit a contention. Yankee Atomic I, CLI-96-7, 43 NRC at 261.[25] Petitioners must come forward with "reasonably precise claims rooted in fact, documents, or expert opinion to proceed." Id. at 262 (citing 10 C.F.R. § 2.714).

Moreover, the State's contention ignores relevant information in the License Application on this topic. The Application states that customers will be required, "if necessary," to "provide additional financial assurances (such as an advance payment, irrevocable letter of credit, third party guarantee or a payment or performance bond)." LA at 1-6 and 1-7 (emphasis added). Thus, the Application does address funding contingencies contrary to the State's assertion. This subcontention mistakenly claims that the Application does not address a relevant matter and it must therefore be dismissed. By the same token, because the State does not address this relevant information, it has set forth no basis on which to challenge its adequacy as required by the amended rules of practice and no genuine dispute of a material issue of fact or law exists.

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[25] "Petitioners offer no evidence whatever suggesting that a Purchaser/Co-owner will either default on its obligation under the Purchase Contract or go bankrupt. Petitioner must submit more than this in order for a contention to be submitted for litigation." Yankee Atomic I, CLI-96-7, 43 NRC at 261.

F. Utah Contention F: Inadequate Training and Certification of Personnel

1. The Contention:

The State alleges in Contention F that:

> Training and certification of PFS personnel fails to satisfy Subpart I of 10 CFR Part 72 and will not assure that the facility is operated in a safe manner.

State Petition at 39. The asserted bases for the contention are set forth on pages 39-41. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated incorporating the specific allegations in its bases as indicated below:

> Training and certification of PFS personnel fails to satisfy Subpart I of 10 C.F.R. Part 72 and will not assure that the facility is operated in a safe manner in that:
>
> a) Contrary to 10 C.F.R. § 72.192, a training and certification program has not been explicitly defined or submitted with the application and a listing of physical conditions that would bar a person from employment in specific positions has not been defined.
>
> b) Contrary to 10 C.F.R. § 72.194, no discussion regarding the physical condition of operators is provided for in the license application. A potential operator should be required to pass a medical examination that certifies the operator has the physical ability to carry on duties of his/her specific job and has no physical impairments or mental conditions that would adversely affect his/her performance or cause operational errors that would endanger public health and safety.
>
> c) The qualifications and training set forth in the license application are not sufficient to guarantee the safe operation of the facility.

2. Applicant's Response to the Contention

a) Failure to Submit a Training and Certification Program

The State contends that the Applicant's training and certification program fails to satisfy Subpart I of 10 C.F.R. Part 72 and will not assure that the facility is operated in a safe manner. The basis for the State's contention is that the Applicant has not explicitly defined a training and certification program and furthermore, that the Applicant has failed to submit a training, certification and testing program with the license application. Finally, the State contends that the Applicant has failed to list physical conditions that would bar a person from employment in specific positions.

This contention must be dismissed because it mistakenly claims that the Applicant failed to address a relevant issue in the application, is without basis, and seeks to impose stricter requirements than those required by the regulation. The State essentially ignores the description of the program in the application, and, except for broad conclusory allegations beyond the scope of the regulations, fails to set forth any basis to support its claim, as required by the Commission's amended pleading requirements, that the program described in the license application is deficient.

The State acknowledges that the Applicant has laid out the PFS organizational structure, including responsibilities and qualifications, in § 9.1 of the SAR. The pre-operational testing program is discussed in § 9.2 and the testing program in discussed in § 9.3. The State ignores completely, however, Chapter 7 of the License Application (LA), entitled "Operator Training," which spells out the training program that PFS intends to establish. A contention that mistakenly claims that an applicant fails to address

a relevant issue must be dismissed. See Section II.C. supra at 15-16. Further, although making bald, conclusory allegations, it fails to explicate how the training program described in Chapter 7 of the License Application and in Chapter 9 of the SAR fails to satisfy the requirements of Subpart I of Part 72. The 1989 amendments to 10 C.F.R. § 2.714 place the burden on a petitioner "to explain why the application is deficient," 54 Fed. Reg. at 33,170, cited with approval in Georgia Power Company (Vogtle Generating Plant, Units 1 and 2), CLI-93-4, 38 NRC 25, 41) (1993). The State has not met that burden here.

10 C.F.R. § 72.192 requires that

> The applicant for a license under this [P]art shall establish a program for training, proficiency testing, and certification of ISFSI or MRS personnel. This program must be submitted to the Commission for approval with the license application.

Id. As required by this regulation, the Applicant's program contains provisions for training, (SAR § 9.3, et. seq.) See, e.g., § 9.3.1, "Program Description," which provides an overview of the training program; § 9.3.2, "Initial Training," § 9.3.2.1, "General Employee Training (GET)," § 9.3.2.2, "Job Specific and Certification Training," § 9.3.3, "Continuing Training," and § 9.4.1.3, "Training On Procedures." Proficiency testing is required by Chapter 7 of the License Application. That chapter requires both written and practical examinations and retraining on a bi-annual basis. License Application at 7-1, SAR at 9.3-2, 9.3-4. The SAR also specifies at § 9.4.1.3 that "[p]ersonnel performing

activities important to safety will be certified to perform such functions and will undergo refresher training and testing a minimum of every two years." SAR at 9.4-4.

A program for certification of ISFSI personnel is described at § 9.3.2.2 of the SAR. The SAR also provides at § 9.4.1.1.4, "Operating Procedures," that "[t]he requirements for certification of personnel operating equipment and controls important to safety will be specified in the operating procedures." SAR at 9.4-3. Chapter 7 of the LA also discusses the certification program for Operators. That chapter states that

> [T]he Operator Training Program will consist of a combination of on-the-job training (OJT) and classroom training leading to Certification. The OJT requirements will be documented in a set of Qualification Cards containing the Job Performance Measures of practical factors that are required to be performed by the Operator. Each person to become Certified must have these Qualification Cards completed prior to being allowed to independently perform the applicable tasks . . . . The operators will have to pass comprehensive written and practical examinations in order to become Certified. The trainee must score 80% or higher on the written exam to pass. The practical exam shall be on a pass/fail basis, as evaluated by previously Certified personnel . . . . The Certified individuals must also pass a medical exam . . . every two years.

Chapter 7, LA at 7-1.

The State ignores completely Chapter 7 of the License Application and, with one exception, makes only bald conclusory allegations concerning the compliance of the SAR with § 72.192. But for the one exception, it fails to identify any basis why the program is deficient. Such generally conclusory allegations, essentially ignoring the detailed

discussion that appears in a license application, are "fatally flawed" and must be dismissed. Rancho Seco, 38 NRC at 247-48.

The one exception to the total lack of basis is the State's contention that "a listing of physical conditions that would bar a person from employment in specific positions has not been defined." State Petition at 40. However, it relates to the physical conditions of operators and the related requirements under § 72.194, and not § 72.192, which imposes no such requirements. As discussed below, § 72.194 does not require, as the State alleges, a listing in the license application of physical conditions that would bar a person from employment in specific positions. Thus, the only specific deficiency alleged by the State with respect to the training and certification program required under 10 C.F.R. § 72.192 "advocate[s] stricter requirements than those imposed by the regulations" and must be rejected as "an impermissible collateral attack on the Commission's rules." Public Service Company, 16 NRC at 1656.

b) No Discussion of Physical Condition of Operators

10 C.F.R. § 72.194 requires that

> [T]he physical condition and the general health of personnel certified for the operation of equipment and controls that are important to safety must not be such as might cause operational errors that could endanger other in-plant personnel or the public health and safety. Any condition that might cause impaired judgment or motor coordination must be considered in the selection of personnel for activities that are important to safety. These conditions need not categorically disqualify a person, if appropriate provisions are made to accommodate such defect.

The State contends that the SAR has no discussion regarding the physical condition of operators, as required by 10 C.F.R. § 72.194. "A potential operator should be required to pass a medical examination that certifies the operator has the physical ability to carry on duties of his/her specific job and has no physical impairments or mental conditions that would adversely affect his/her performance or cause operational errors that would endanger public health and safety." State Petition at 40.

The State, however, completely ignores the fact that the License Application requires that "certified individuals must pass a medical exam in accordance with ANSI N546-1976, 'Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants.'" LA at 7-1. In addition, the License Application requires a re-examination every two years. LA at 7-1. Thus, the application addresses the very issue that the State claims that it should and the State's claim accordingly must be rejected for failing to raise a genuine dispute. See Section II.C.2. supra. Moreover, the State certainly could not contend that operators deemed medically qualified to operate nuclear reactors under the rigorous standards of ANSI N546-1976 are not, a fortiori, also medically qualified to operate an ISFSI. Additionally, this argument must be rejected as advocating stricter requirements than those imposed by 10 C.F.R. § 72.194. This regulation, unlike 10 C.F.R. § 72.192, does not impose information requirements for the License Application; it imposes regulatory requirements applicable to the on-going operation of the ISFSI. Thus, the claim that the application does not discuss the physical condition of operators per 10 C.F.R. § 72.194 must be rejected as "advocat[ing] stricter requirements than those imposed by the regulations." See Section II.B. supra at 6.

Thus, again, the State has made bald conclusory allegations which both collaterally attack Commission regulations and ignore relevant information in the application. This contention must therefore be rejected.

c) The Qualifications and Training Set Forth in the SAR Are Not Sufficient to Guarantee Safe Operation of the Facility

The essence of the State's contention is that the training program described in the Applicant's SAR is not detailed enough. That program does not describe minute details such as actual questions to be asked on written examinations and operating tests. Nor does the Applicant specify the specific details of the training program and the minimum passing grade for certification.

This contention must be rejected as a collateral attack on Commission regulations. Nothing in the applicable regulation, § 72.192, requires the level of detail that the State claims Applicant must provide in submitting its training program for approval along with its License Application. Moreover, by analogy to the requirements for Emergency Planning, such details need not be submitted with the License Application. In Louisiana Power and Light Company (Waterford Steam Electric Station, Unit 3), ALAB-732, 17 NRC 1076 (1983), intervenors objected to the fact that at the time of the hearing, the "implementing procedures" for the Applicant's emergency plan had not been submitted. Id. at 1080. The Appeal Board ruled that

> . . . the Commission never intended the implementing procedures to be required for the 'reasonable assurance' finding and thus to be prepared and subject to scrutiny during the hearing . . . . [W]e believe the Commission did not want licensing hearings to become bogged down with litigation about such details. Instead, the focus should be

> on whether an applicant's emergency plan itself satisfies the . . . more broadly drafted standards of [the applicable regulation] . . . . [B]ecause [the] intervenors' complaint about the non-finality of the implementing procedures amounts to a challenge to the Commission's regulations, we must reject it.

Id. at 1107.

In a similar vein, an applicant is required to submit a Quality Assurance (QA) program as part of its SAR. The regulations pertaining to QA programs require identification of the structures, systems, and components important to safety. 10 C.F.R. § 72.24(n). But the License Application need not include actual QA procedures. See, e.g., Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-734, 18 NRC 11, 13-14 (1984), which held that an applicant need not submit with its FSAR a QA manual containing all procedures that will be reviewed by NRC prior to granting of a license.

Similarly, the State here challenges the level of detail provided in Applicant's License Application pertaining to its proposed training program. But it is not reasonable at this point in time to require submittal actual proposed examination questions and practical factors for a facility that has not yet been constructed -- and the NRC does not. The State's contention advocates stricter requirements than those imposed by the regulation and is therefore "an impermissible collateral attack on the Commission's rules" which must be rejected. See Section II.B. supra at 5-6.

G. Utah Contention G: Quality Assurance

1. The Contention:

The State alleges in Contention G that:

> The Applicant's Quality Assurance ("QA") program is utterly inadequate to satisfy the requirements of 10 C.F.R. Part 72, Subpart G.

State Petition at 42. The asserted bases for the contention are set forth in 10 pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows, incorporating the specific allegations raised in its bases.

> The Applicant's Quality Assurance ("QA") program is utterly inadequate to satisfy the requirements of 10 C.F.R. Part 72, Subpart G in that
>
> a) the Applicant's QA program description does not contain enough detail to demonstrate how the Applicant can and will conduct a QA program that complies with the numerous quality assurance standards set forth in Subpart G;
>
> b) the QA program description is completely inadequate to satisfy the requirements of 10 C.F.R. §§ 72.154 (control of purchased material, equipment and services), 72.156 (identification and control of materials, parts and components) and 72.166 (handling, storage, and shipping control) and the Applicant lacks control over the loading of fuel casks at reactor sites;
>
> c) the QA program description in the SAR is inconsistent with the description in the Applicant's QA Program Description in that the Program Description describes a different organization for PFS than that described in the SAR;
>
> d) the Applicant's QA program fails to demonstrate the independence of the QA organization and fails to

adequately described the interrelationships between the QA Committee and various company organizations other than the Board of Managers.

2. Applicant's Response to the Contention

The State raises a number of issues under Contention G, which we address in turn below.

a) Lack of Detail

The State alleges in Contention G that the Applicant's QA program description is inadequate. State Petition at 42 (e.g., "the description of the QA program . . . falls woefully short of [the regulatory] standard"). This is a generalized attack on the Applicant's QA program that should be dismissed as lacking sufficient information "to show that a genuine dispute exists with the applicant on a material issue of law or fact." 10 C.F.R. § 2.714(b)(2)(iii). The State submits no material to support such a broad attack. Id. Nonspecific contentions that do not provide any serious or credible support for their allegations should not be admitted. Louisiana Power & Light Company (Waterford Steam Electric Station, Unit 3), ALAB-812, 22 NRC 5, 35 (1985). A bald or conclusory allegation of dispute is not sufficient to admit a contention. Therefore, the Board should disregard the introduction to Contention G as lacking sufficient information "to show that a genuine dispute exists with the applicant on a material issue of law or fact." 10 C.F.R. § 2.714(b)(2)(iii).

The State also alleges that the Applicant's QA program description (QAPD) "constitutes nothing more than a general summary of PFS's intentions to implement a QA program," and that the QA program description contains "not a shred of information

about how PFS intends to implement the general goals set forth in the QAPD." State Petition at 42. The QA program does, however, contain more than a general summary of its intentions to implement a program and it does contain information about how the applicant intends to implement the goals set forth in the QAPD. E.g., Quality Assurance Program (QAP) at Tab "QA Procedures." Most notably, even though they are not required to be submitted as part of the licensing application, see infra, the QA program contains 51 pages of QA procedures. Quality Assurance Program (QAP) at Tab "QA Procedures." The QA Program Description specifically incorporates these procedures by reference. QA Program Description at 4 ("The QA Program shall be comprised of . . . Quality Assurance Procedures which contain detailed implementing instructions."). Furthermore, the SAR also contains information as to how the Applicant plans to implement its QA program. SAR at 11.1-1. This contention mistakenly claims that Applicant failed to address a relevant issue in the application and, accordingly, it should be dismissed. See Section II.C.2. supra at 15-16.

The State asserts that the Applicant's QA program lacks detail. State Petition at 43-44. This subcontention should be dismissed as an impermissible collateral attack on the Commission's rules for advocating stricter requirements than those imposed by regulations. The detail the State seeks is to be found in the Applicant's QA procedures, but license applicants are not required to submit actual QA procedures with their license applications. See Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-734, 18 NRC 11, 13-14 (1983) (discussing QA regulations under Part 50, Appendix B); 53 Fed. Reg. 31,656 (1988) (QA criteria under Part 72 are the same as

those under Part 50, Appendix B);[26] see also NUREG-1536, "Standard Review Plan for Dry Cask Storage Systems" at 13-4 (January 1997) (Staff should determine whether procedures are in place *or will be in place* before work begins).[27] Therefore, because the State advocates stricter requirements than those imposed by regulations, it launches an impermissible collateral attack on the Commission's rules and should be dismissed. See Section II.B. supra at 5-7.

b) Lack of Quality Control

The State asserts that the Applicant's QA program description is inadequate to satisfy the requirements of 10 C.F.R. §§ 72.154 (control of purchased material, equipment and services), 72.156 (identification and control of materials, parts and components) and 72.166 (handling, storage, and shipping control). State Petition at 45. First, like Subcontention (a), this subcontention should be dismissed as an impermissible collateral attack on the Commission's rules for advocating stricter requirements than those imposed by regulations. The State is again claiming that the Applicant must submit with its license application the kind of detail to be found in the QA procedures which implement the QA regulations. See State Petition at 45 ("PFS's cursory discussion . . . fails to address the specific quality control issues raised"). This is incorrect: license

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[26] While QA regulations in Part 50, in some places, require an applicant to specify *how* a standard will be met, those requirements can be satisfied by an applicant committing to submit, in the future, procedures that will conform to detailed standards, such as ANSI Standards or NRC Regulatory Guides, that will in fact satisfy the requirement. See Seabrook, ALAB-734, 18 N.R.C. at 13-16.

[27] While Standard Review Plans are not binding regulations, adherence to their guidelines is evidence of regulatory compliance. See, e.g., Long Island Lighting Company (Shoreham Nuclear Power Station, Unit 1), ALAB-788, 20 N.R.C. 1102, 1151 & n.280 (1984) (approving of licensee's QA program in part based on compliance with NRC Standard Review Plan).

applicants are not required to submit QA procedures with their license applications. See Seabrook, ALAB-734, 18 NRC at 13-16; NUREG-1536 at 13-4.

Second, this subcontention must be dismissed as a collateral attack on the NRC's regulations because it implies that the Applicant must have control over the spent fuel cask system loading activity that will take place at reactor sites. See State Petition at 46. This is not the case, however, because the reactors are required to have NRC-regulated QA programs of their own. 10 C.F.R. §§ 50.34(a)(7), (b)(6)(ii). The reactor QA programs will apply to cask system loading because the cask systems are "systems . . . that prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public." 10 C.F.R. § 50 App. B, Introduction. Accordingly, the reactor QA programs must include provisions to control and audit the procedures used to load the fuel cask systems. 10 C.F.R. § 50 App. B, sections V, XVIII. Thus, while the Applicant may not have control over the fuel cask systems while they are at the reactor sites, the reactor licensees will. Moreover, the State may not assert that the reactor licensees will not implement such programs because a petitioner may not assert that an NRC licensee will violate NRC regulations without "some particularized demonstration that there is a reasonable basis to believe [that the licensee] would act contrary to their explicit terms." General Public Utilities Nuclear Corporation (Oyster Creek Nuclear Generating Station), LBP-96-23, 44 NRC 143, 164 (1996). The State makes no such demonstration here. See State Petition at 46. Therefore, because this subcontention seeks to have imposed on the Applicant a requirement to provide quality control over the loading of the fuel cask systems at the reactor sites, this subcontention

must be dismissed as "an impermissible collateral attack on the Commission's rules" for "advocat[ing] stricter requirements than those imposed by regulations."

c) Inconsistency with the SAR

The State asserts that the QA program description in the SAR is inconsistent with the description in the Program Description in that the QA Program Description describes a different organization for PFS than that described in the SAR. State Petition at 49.[28] This subcontention should be dismissed because it is moot. Texas Utilities Electric Company (Comanche Peak Steam Electric Station, Unit 2), CLI-93-10, 37 NRC 192, 200 (1993). The Applicant has updated its QA program description such that it is now consistent with the SAR. Thus the issue is no longer "live:" "the relief sought would . . . make [no] difference to the legal interests of the [petitioner]" Comanche Peak, CLI-93-10, 37 NRC at 200. "The mootness doctrine applies to all stages of review . . . ." Id. Therefore, this subcontention must be dismissed.

This subcontention should also be dismissed because it alleges a QA error without "substantial safety significance". See Carolina Power & Light Company (Shearon Harris Nuclear Power Plant), CLI-87-1, 25 NRC 1, 5 (1987) (resolving a 10 C.F.R. § 2.206 petition). Any discrepancies between the business organizations depicted in the QA Program Description and the SAR are merely administrative errors unrelated to the function of the Applicant's QA program or facility items important to safety. See 10

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[28] The State goes on to allege that the independence of the QA organization depicted in Program Description "may be jeopardized." State Petition at 49. We address in the next section of our response the issue of organizational independence because it is raised generally in the State's Subcontention (d). See id. at 50.

C.F.R. § 72.142 (the application must describe the organizational structure for organizations performing activities affecting the functions of items important to safety). In both documents, the Quality Assurance Committee is shown as reporting to the Board of Managers. See QA Program Description at 21; SAR at Figure 9.1-1. The reference to "Board of Directors," QA Program Description at 3, was merely a scrivener's error; the Board is called the "Board of Managers" on the same page and on the organizational chart. Id. at 3, 21. Typographical errors in a document do not give rise to a litigable issue. Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 300 (1995). Therefore, because any discrepancy between the QA Program Description and the SAR was merely caused by an administrative error and does not affect the function of the Applicant's QA program, such discrepancies are without substantial safety significance. See 10 C.F.R. § 72.142. Therefore, this subcontention should be dismissed.

d) QA Independence

The State asserts that the Applicant's QA program "fails to demonstrate the independence of the QA organization" and fails to adequately describe the interrelationships between the QA Committee and various company organizations other than the Board of Managers. State Petition at 49-51. So far as this subcontention asserts that the Applicant's QA organization has insufficient independence, it should be dismissed as a collateral attack on the NRC's regulations for advocating stricter requirements than those imposed by the regulations. Section 72.142 requires organizations performing QA functions to be sufficiently independent and report to a

level of management high enough to enable them to perform their functions effectively. 10 C.F.R. § 72.142; see Duke Power Company (Catawba Nuclear Station, Units 1 and 2), LBP-84-24, 19 NRC 1418, 1459-60 (1984) (discussing requirements under Part 50, Appendix B, which are identical to those under Part 72); Shoreham, ALAB-788, 20 NRC at 1150-51. Nevertheless, complete independence is not required; responsibility for all activities at the facility necessarily comes together at some level of management. Catawba, LBP-84-24, 19 NRC at 1459. Thus a QA organization is sufficiently independent, for example, even if one executive oversees it and another organization responsible for construction, so long as both organizations are managed independently. Id.

In the Applicant's case, the Board of Managers, the company's highest level of management, oversees the QA Committee and a number of other organizations. QA Program Description at 3, 21; SAR Figure 9.1-1. Yet the QA Committee is managed independently. SAR at 11.1-2. Furthermore, even in the construction and operational phases of the project, when the QA Committee will report to the Project Manager and General Manager, respectively, the QA Committee will remain independent of the finance, engineering, maintenance and all other construction or operational departments and all organizations will retain their own managers. SAR at 11.1-2, Figures 9.1-2, 9.1-3. Therefore, under the regulations, the Applicant's QA organization is sufficiently independent to perform its function effectively. 10 C.F.R. § 72.142; see Catawba, LBP-84-24, 19 NRC at 1459. Thus the subcontention is an impermissible collateral attack on

the NRC's regulations for advocating stricter standards than they require and it must be dismissed. See Seabrook, LBP-82-106, 16 NRC at 1656.

In addition to alleging that the Applicant's QA organization is insufficiently independent, the State also suggests that the Applicant "[a]llow[s] responsible individual organization management to determine the adequacy of the QA over their own programs," State Petition at 51, based on the Applicant's statement in its QA Program Description that "[m]anagement of other organizations participating in the Quality Assurance program shall regularly review the status and adequacy of that part of the program which they are executing." QA Program Description at 4. The State's suggestion is unfounded:

> Quality Assurance . . . is given full responsibility for . . . assuring uniform implementation of the Quality Assurance Program requirements. Quality Assurance has the authority and resources to maintain oversight and initiate management action to limit further processing on items of indeterminate quality, to initiate management action to resolve any deficiencies, and to assure that satisfactory resolutions have been achieved prior to authorizing further processing.

QA Program Description at 2. Moreover, the Applicant's statement quoted by the State is merely a commitment by line management to be responsible for the achievement of quality. See NUREG-1536 at A-1 (a QA program does not relieve line management of such responsibility). To be admitted, a contention may not ignore relevant material submitted by an applicant. Vogtle, LBP-91-21, 33 NRC at 424; Rancho Seco, LBP-93-23, 38 NRC at 247-48. The State's suggestion completely ignores the material quoted

above, which is located in the same document and within two pages of the sentence the State gives as the source of its suggestion. Compare State Petition at 51 with QA Program Description at 2 and 4. Therefore, to the extent that the State's suggestion constitutes an independent subcontention, it should be dismissed.

Finally, to the extent that the subcontention asserts that the Applicant should have described the interrelationships between the QA Committee and various company organizations other than the Board of Managers, it is incorrect. See SAR at Figures 9.1-1 to 9.1-3. The organizational charts in the SAR indicate that the Applicant's QA manager reports to at least the same organizational level as the highest line manager directly responsible for performing activities affecting quality. See id.; NUREG-1536 at A-1. Because it has ignored information in this application, it should be dismissed. Furthermore, this subcontention should be dismissed as lacking sufficient information "to show that a genuine dispute exists with the applicant on a material issue of law or fact." 10 C.F.R. § 2.714(b)(2)(iii). The State cites no factual basis, expert opinion, or legal standard to support its allegations that the Applicant's information regarding the interrelationships between the QA Committee and other organizations does not meet the requirements of 10 C.F.R. Part 72. See State Petition at 50-51. Therefore, this subcontention must be dismissed.

H. Utah Contention H: Inadequate Thermal Design

1. The Contention

The State alleges in Contention H that:

> The design of the proposed ISFSI is inadequate to protect against overheating of storage casks and of the concrete cylinders in which they are to be stored.

State Petition at 52. The asserted bases for the contention are set forth in eight pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows, incorporating the specific allegations raised in its bases:

> The design of the proposed ISFSI is inadequate to protect against overheating of storage casks and of the concrete cylinders in which they are to be stored in that:
>
> a) Storage casks used in the License Application are not analyzed for the PFS maximum site design ambient temperature of 110°F.
>
> b) The maximum average daily ambient temperatures for unnamed cities in Utah nearest the site do not necessarily correspond to the conditions in Skull Valley; PFS should provide information on actual temperatures at the Skull Valley site.
>
> c) PFS's projection that average daily temperatures will not exceed 100°F fails to take into account the heat stored and radiated by the concrete pad and storage cylinders.
>
> d) In projecting ambient temperatures, PFS fails to take into consideration the heat generated by the casks themselves.
>
> e) PFS fails to account for the impact of heating the concrete pad on the effectiveness of convection cooling.
>
> f) PFS has not demonstrated that the concrete structure of the TranStor cask is designed to withstand the temperatures at the proposed ISFSI.
>
> g) PFS has not demonstrated that the concrete structure of the HI-STORM cask is designed to withstand the temperatures at the proposed ISFSI.

2. Applicant's Response to the Contention

The State raises several issues under its Contention H. We address in turn below each of the specific allegations raised by the State in Contention H as set forth above.

a) Failure to Analyze Storage Casks for Maximum Site Design Ambient Temperature

The State contends that the License Application is deficient because the TranStor and HI-STORM storage casks used in the License Application are not analyzed for the PFSF maximum "site design ambient temperature of 110°F." See State Petition at 53. The State's allegation misconstrues the meaning of the site design temperature limits and overlooks pertinent portions of the License Application and the TranStor and HI-STORM Safety Analysis Reports that address this issue.

First, the State's contention is clearly mistaken with respect to both the TranStor and HI-STORM storage casks. Both storage casks have been analyzed for a maximum daily ambient temperature of 125°F, well above the 110°F daily maximum temperature discussed in the State's contention. The State's own contention acknowledges this analysis for the TranStor cask. See State Petition at 56-57 ("SNC presents concrete temperature calculations, based on a worst-case temperature of 125°"). This analysis is clearly documented in both the License Application and the TranStor and HI-STORM SARs. See e.g. SAR at 4.2-32, Table 4.2-6; see also, Sierra Nuclear Corporation, Safety Analysis for the TranStor™ Storage Cask System at 4-1 ("Thermal Evaluation"), 11-19 ("Maximum Anticipated Heat Load") (Rev. B, 1997) ("TranStor SAR"); HOLTEC International, Topical Safety Analysis Report for the HI-STORM 100 Cask System, 11.2-

22 ("Environmental Extreme Accident Temperature") (Rev. 2, 1997) ("HI-STORM SAR"). The State's contention does not address, or challenge the validity of, the 125°F maximum daily ambient temperature analysis for either the TranStor storage cask or the HI-STORM storage cask as documented in the Applicant's License Application and the TranStor and HI-STORM SARs. Having mistakenly claimed that the Application did not address a relevant issue, the contention should be dismissed. In setting forth a contention pursuant to 10 C.F.R. § 2.714(b), a petitioner is required to "read the pertinent portions of the license application, including the Safety Analysis Report and the Environmental Report, state the applicant's position and the petitioner's opposing view." See 54 Fed. Reg. 33,168, 33,170 (1989) (Commission discussing its revised, higher threshold for admissibility of contentions). The State's allegation that the TranStor and HI-STORM storage casks have not been analyzed for a maximum "site design ambient temperature of 110°F" must be rejected for failing to address the pertinent portions of the Applicant's License Application and for failing to provide a sufficient basis for a admissible contention.

Second, the State's contention regarding the TranStor and HI-STORM storage casks misunderstands the meaning of the PFS site design temperature limits and overlooks pertinent portions of the PFSF License Application and the TranStor and HI-STORM SARs that address this issue. Both storage casks have been analyzed for the maximum daily average ambient temperature specified for the PFS site. The State's contention is mistaken.

The State's contention alleges that "PFS has established a site design ambient temperature of 110°F," however, both the HI-STORM and TranStor storage casks "are designed for a daily average ambient air temperature of 80°F [and 75°F, respectively], and off-normal conditions of . . . 100°F." State Petition at 53 (emphasis added). While both of the State's statements are true, the two statements do not address the same temperature limit. The "site design ambient temperature of 110°F" referenced by the State is the PFS specification for the maximum daytime ambient temperature at any one time at the site. See SAR at 3.2-5. The maximum "daily average ambient air temperature of . . .100°F" referenced by the State is the maximum daily average temperature sustained over a period of several days and nights at the site. See SAR at 4.2-15 (emphasis added).

The assumption of a sustained 100°F maximum daily average temperature for the PFS storage cask analysis envelopes any sustained daily average temperatures expected to be seen at the PFSF site. See SAR at 4.2-15; see also discussion of subcontention b. This assumption of an average temperature of 100°F sustained for four to five days and nights envelopes, not only the PFSF site, but also "any facility in the United States." See TranStor SAR at 11-3; see also HI-STORM SAR at 11.1-2. Both the HI-STORM and TranStor casks are analyzed for this sustained 100°F maximum daily average temperature. See SAR at 4.2-15, 4.2-32; see also HI-STORM SAR at 11.1-2 to 4; TranStor SAR at 4-1, 11-3. The State's failure to understand the PFSF temperature specifications and storage cask analyses does not form a sufficient basis for a litigable contention. The State's contention that the HI-STORM and TranStor storage casks have not been analyzed for the applicable temperature specifications for the PFSF site must be

dismissed for failing to establish a sufficient basis for a genuine dispute with the Applicant on a material issue of fact or law. See Section II.C. supra.

b) Maximum Average Daily Ambient Temperature for Unnamed Cities in Utah Do Not Necessarily Correspond to the Conditions in Skull Valley

The State alleges that the License Application is deficient because the maximum average daily ambient temperature for "unnamed cities somewhere in Utah do not necessarily correspond to the conditions in Skull Valley." See State Petition at 54. The State further contends that "PFS should provide information on actual temperatures at the Skull Valley site." Id.

The PFS uses a maximum daily average ambient temperature specification of 100°F for performing storage cask sustained off-normal temperature analyses. See SAR at 4.2-15, 4.2-32. The License Application states that "[a]s shown in Section 2.3.1.2, the maximum average daily ambient temperature for cities in Utah nearest the site is 93.2°F." See id. at 4.2-15. The State's contention erroneously charges that the 93.2°F cited in the License Application is for "unnamed cities somewhere in Utah." State Petition at 54. Section 2.3.1.2, ignored by the State, clearly indicates that 93.2°F is the average maximum monthly temperature in Salt Lake City. SAR at 2.3-3.

Furthermore, the License Application also provides the maximum daily average ambient temperatures for Dugway and Iosepa, which are located in Skull Valley approximately 12 and 9 miles respectively from the site. ER, at Table 2.4-4. The maximum daily average temperatures at Dugway and Iosepa are shown in the License

Application to be 94°F and 95°F, respectively. Id. The State's contention does not address this data and has provided no basis why the temperatures for these sites "do not . . . correspond to the conditions in Skull Valley." See State Petition at 54.

The 100°F maximum daily average ambient temperature specification for the PFS comfortably bounds all of the temperatures for nearby locations in Utah, including the maximum temperatures identified in the License Application of 93.2°F for Salt Lake City, 94°F for Dugway, and 95°F for Iosepa. The State has provided no information to the contrary. Furthermore, as discussed above, "one would not normally expect ambient [temperatures] at any facility in the United States to be subjected to such conditions." TranStor SAR at 11-3 (emphasis added). The State does not take issue with this statement. The State's contention must be rejected for failing to provide a sufficient basis for an admissible contention.

c) Projection of Average Daily Temperatures Fails Take into Account Heat Stored in Concrete

The State contends that PFS's projection that average daily temperatures will not exceed 100°F "fails to take into account the heat stored and radiated by the concrete pad and by the concrete cylinders in which each cask will be stored." See State Petition at 54. The State asserts that "[t]hese massive concrete structures will serve as reservoirs that trap and radiate heat throughout the day and night, thus having a potentially significant effect on average ambient temperatures." Id. The State provides no facts or references to support this contention. Regarding this issue, the TranStor safety analysis report states that

> sun shine[] for 12 daylight hours . . . is not enought to affect the massive concrete structure. The temperatures of the bulk of the concrete and the basket never see these transient effects.

TranStor Safety Analysis Report at 4-1. The State's contention neither addresses, nor challenges the validity of, this conclusion. The State has provided no support whatsoever for this contention. The State's contention must be rejected for failing to provide a sufficient basis for an admissible contention, as required by the Commission's regulations.

d) Failure to Consider Heat Generated by the Casks

The State contends that in projecting ambient temperatures, "PFS fails to take into consideration the heat generated by the casks themselves." See State Petition at 54. The State alleges that "[g]iven the close proximity of the casks, it is likely that additional heat from an adjacent cask would increase the external and internal temperatures of the concrete storage cylinders, and therefore the maximum cladding temperature." Id. at 54-55. The only other information in the State's contention is the distance between the storage casks, 3.7 feet for TranStor casks and 4 feet for HI-STORM casks. See id. at 54. The State provides no additional basis to support its allegation.

The State's contention provides no facts, references, or any other information to identify how "the close proximity of the casks" will affect the site ambient temperature, or to even attempt to quantify what such an effect would be. The maximum daily average ambient temperature specification of 100°F in the License Application has built in margin to address uncertainties in the ambient temperature at the PFSF site. The storage casks in

the License Application are analyzed and shown to be adequate for a worst case long range steady-state (i.e. 24 hours a day for 4 to 5 days) temperature of 100°F. See SAR § 8.1.2.1. This maximum average daily ambient temperature provides a margin of 5°F over the highest recorded average daily temperature in Skull Valley near the PFSF site of 95°F (at Iosepa, Utah) as shown under subcontention b above. The State's contention neither addresses, nor challenges the validity of this 5°F margin in the PFSF temperature specifications, nor provides any information, or any basis, to indicate that the alleged ambient temperature increase from "the close proximity of the casks" would invalidate the margin built into the temperature specification in the License Application. See State Petition at 54. In fact, the State's contention provides no information of any sort on what the effect of the alleged close proximity of the casks would be, much less whether the alleged effect would violate the conservative 5°F margin (over and above the highest daily average temperature on record for Skull Valley) that is built into the PFSF storage cask temperature specifications of 100°F. Thus, the State has failed to provide the necessary information showing why its bases support its contention and the contention must be rejected.

e) Failure to Take into Account the Impact of Heating the Concrete Pad

The State alleges that the License Application is deficient because PFS fails to account for the impact of heating the concrete pad on the effectiveness of convection cooling of the storage casks. See State Petition at 55. The State's contention overlooks the fact that this is taken into account in the thermal analyses supporting the License

Application. The State's assertion that "the heat retaining nature of the concrete pad" is overlooked in the storage cask thermal analysis, id., in fact overlooks the assumptions in the TranStor and HI-STORM storage cask thermal analyses set forth in the SARs, both of which use extremely conservative assumptions regarding the concrete pad.

In reality, the storage cask will transfer heat by conduction to the ground through the concrete pad. This process will reduce the temperature of the storage cask and slightly raise the temperature of the concrete pad. As the source for an additional heat sink (the earth), the effect of the concrete pad is to reduce the temperatures in the storage cask. To ensure conservatism in the storage cask thermal analysis, however, both the TranStor and the HI-STORM thermal analysis assume that no heat is transferred out of the storage cask through the concrete pad. The TranStor thermal analysis states that "[f]or conservatism, no heat dissipation from the cask bottom into the ground is assumed." TranStor SAR at 4-15. The HI-STORM thermal analysis states that "[t]he bottom of the overpack, in contact with the ISFSI pad, is conservatively modeled as an insulated surface." HI-STORM TSAR at 4.4-2. Because the analysis assumes no heat is dissipated from the casks to the ground (via the concrete pads), the effect of these assumptions is to increase temperatures in the thermal analysis of the storage cask. This is clearly a conservative assumption. The State has neither addressed, nor challenged the validity of, these conservative assumptions made regarding the concrete pad in the TranStor and HI-STORM thermal analyses. The State's contention must be rejected for failing to provide a sufficient basis for an admissible contention, as required by the Commission's regulations.

f) Failure to Demonstrate that the Concrete Structure of the TranStor Cask is Designed to Withstand the Temperatures at the Proposed ISFSI

The State contends that the License Application is deficient because PFS has not demonstrated that the concrete structure of the TranStor cask is designed to withstand the temperatures at the proposed ISFSI. See State Petition at 56-57. Specifically, the State contends that the TranStor thermal analysis shows that the concrete temperature exceeds the NRC recommended values for structural integrity of concrete in off-normal and accident conditions. The State's contention must be rejected for failing to address the pertinent portions of the Applicant's license application and for failing to provide a sufficient basis to show a genuine dispute with the Applicant, as required by the Commission's regulations. See 10 C.F.R. § 2.714(b).

The State's allegation that the concrete temperatures for the TranStor design "either exceed or are very close to the NRC's recommended limits"[29] set forth in a December 17, 1996 Request for Additional Information ("RAI") from the NRC Staff to Sierra Nuclear Corporation, is mistaken. The State's contention selectively leaves out extremely important information from the RAI. A document put forth by a petitioner to support a contention "is subject to scrutiny both for what it does and does not show." Yankee Atomic Electric Company (Yankee Nuclear Power Station), LBP-96-2, 43 NRC

[29] As to the State's contention that the concrete temperatures in the TranStor design "are very close to the NRC's recommended limits," see State Petition at 56 (emphasis added), it is axiomatic that coming "very close to" but not exceeding a regulatory limit or regulatory guidance is, in fact, complying with that regulation or guidance, and is not a cognizable basis for a litigable contention. See 10 C.F.R. § 2.714(b).

61, 90, rev'd in part on other grounds, CLI-96-7, 43 NRC 235 (1996). A document put forth by the petitioner is "subject to Board scrutiny, both as to those portions of the report that support their assertions and those portions that do not." Id. at 90 n.30. It is also established that a petitioner's imprecise reading of a reference document cited in support of a contention cannot serve as a sufficient basis for a contention. Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 300 (1995).

The State's contention alleges that the TranStor storage cask design exceeds the "NRC . . . policy on temperature limits for the concrete structures in which storage casks are housed," as stated in the December 17, 1996 RAI. The State contends that the NRC policy stated in the RAI is that

> The Staff recommends a maximum allowable temperature of 150°F for normal operation for bulk concrete (assumed here to be inner concrete), 200°F for local areas, 350°F and [sic] for accident or other short-term periods.

State Petition at 56. The State then asserts that the concrete temperatures in the TranStor design exceed "the NRC's recommended limits" for both "a worst-case temperature of 125°[F] with maximum solar load, lasting for 12 hours," and "under off-normal conditions." Id. at 56-57. What the State's contention neglects to state is that "the NRC's recommended limits" in the December 17, 1996 RAI also include acceptable alternative concrete temperature criteria, which the TranStor design does comply with.

"The NRC's recommended limits" in the December 17, 1996 RAI cited in the State's contention include both the criteria quoted by the State and acceptable alternative

criteria selectively ignored by the State. The actual "NRC[] recommended limits" that are stated in the RAI are as follows:

> The staff's position on use of concrete at temperatures greater than 65.6°C (150°F) has been documented in previous SERs. That policy is as follows:
>
> Discussion of Concrete Constituents and Temperature Suitability
>
> In the absence of tests to evaluate the reduction in strength at elevated temperatures and to show that the concrete will not deteriorate with or without load (ACI-349, Appendix A.4), ACI-349 limits concrete temperatures to 65.6°C (150°F) for bulk concrete, 93.3°C (200°F) for local areas for normal operation or any long-term period, and 177°C (350°F) for accident or other short-term periods.
>
> The staff accepts the ACI-349 temperature limits; however, based on separate research and analysis, the following alternative criteria are also acceptable:
>
> 1. If concrete temperatures of general or local areas do not exceed 93.3°C (200°F) in normal or off-normal conditions/occurrences, no tests or reduction of concrete strength are required.
>
> 2. If concrete temperatures of general or local areas exceed 93.3°C (200°F) but do not exceed 149°C (300°F), no tests or reduction of concrete strength are required if Type II cement is used and aggregates, fine and coarse, meet the following two criteria:
>
> a. satisfy ASTM C33 requirements and other requirements as referenced in ACI-349 for aggregates; and
>
> b. have demonstrated a coefficient of thermal expansion . . . no greater than 1×10^{-5} cm/cm/°C (6×10^{-6} in/in/°F) or be one or a mixture of the following minerals: limestone, dolomite, marble, basalt, granite, gabbro, or rhyolite.
>
> . . .

> For a case in which off-normal temperatures exceed 93.3°C (200°F) but are less than 107°C (225°F), the list of acceptable aggregates cited in paragraph 2b above may be amended to include two additional minerals, quartz and sandstone; however, their use is limited to fine aggregate only.

See RAI at 9-10 (emphasis added). Therefore, what the RAI shows, and what the State did not disclose, is that the "NRC's recommended limits" in the RAI include both the ACI-349 temperature limits cited by the State and alternative criteria. The TranStor design meets the "NRC's recommended limits," in their complete form as given in the RAI, for both accident and off-normal conditions.

First, the State is mistaken in claiming that the concrete temperatures in the TranStor design exceed "the NRC's recommended limits" for "a worst-case temperature of 125°[F] with maximum solar load, lasting for 12 hours." See State Petition at 56-57. This scenario is an accident condition for the PFSF. See PFSF SAR at 4.2-32; see also TranStor SAR at 11-19 ("Maximum Anticipated Heat Load, Accident Analysis"). The concrete temperature limit for this accident condition is 350°F. See State Petition at 56; see also SAR at Table 3.6-1 ("Summary of PFSF Design Criteria); see also TranStor SAR at 4-14 (Table 4.1-1); see also December 17, 1996, RAI at 9. The TranStor storage cask design complies with this temperature criteria for the scenario of "worst-case temperature of 125°[F] with maximum solar load, lasting for 12 hours," as presented in the State's contention. See SAR at Table 4.2-6 (showing an inner concrete temperature of 257°F, substantially less than the recommended limit of 350°F, for the "extreme hot ambient

temperature" accident condition); see also TranStor SAR at 4-14 (Table 4.1-1) (showing the same data for the "12 hour max. thermal load" accident condition).

The State's contention that the concrete temperatures in the TranStor design exceed "the NRC's recommended limits" for "a worst-case temperature of 125°[F] with maximum solar load, lasting for 12 hours" and "under off-normal conditions" does not address, or challenge the validity of, the results of this calculation in the Applicant's Safety Analysis Report. In setting forth a contention pursuant to 10 C.F.R. § 2.714(b), a petitioner is required to "read the pertinent portions of the license application, including the Safety Analysis Report and the Environmental Report, state the applicant's position and the petitioner's opposing view." See 54 Fed. Reg. 33,168, 33,170 (1989). The State's allegation that the concrete temperatures in the TranStor storage cask design exceed "the NRC's recommended limits" for "a worst-case temperature of 125°[F] with maximum solar load, lasting for 12 hours" and "under off-normal conditions" must be rejected for failing to address the pertinent portions of the Applicant's license application and for failing to provide a sufficient basis for a admissible contention.

Second, the State is mistaken in claiming that the concrete temperatures in the TranStor design exceed "the NRC's recommended limits" "under off-normal conditions." See State Petition at 57. The State's contention fails to acknowledge that the RAI established "alternative criteria" for concrete temperatures. See RAI at 9. The "alternative criteria" for off-normal conditions included the following:

> 2. If concrete temperatures of general or local areas exceed 93.3°C (200°F) but do not exceed 149°C (300°F), no tests or reduction of concrete strength are required if Type

> II cement is used and aggregates, fine and coarse, meet the following two criteria:
>
> a. satisfy ASTM C33 requirements and other requirements as referenced in ACI-349 for aggregates; and
>
> b. have demonstrated a coefficient of thermal expansion . . . no greater than $1x10^{-5}$ cm/cm/°C ($6x10^{-6}$ in/in/°F) or be one or a mixture of the following minerals: limestone, dolomite, marble, basalt, granite, gabbro, or rhyolite.
>
> . . .
>
> For a case in which off-normal temperatures exceed 93.3°C (200°F) but are less than 107°C (225°F), the list of acceptable aggregates cited in paragraph 2b above may be amended to include two additional minerals, quartz and sandstone; however, their use is limited to fine aggregate only.

Id. at 9-10 (emphasis added). Thus, under "NRC's recommended limit[]" for concrete temperatures "under off-normal conditions" is 225°F, when the conditions established by the NRC for concrete aggregate materials (material type and coefficient of thermal expansion) are met. See id. The TranStor storage cask design incorporated the NRC's recommended alternative criteria for concrete temperatures under off-normal conditions into the design and the Safety Analysis Report well before the Applicant's License Application was submitted. The NRC-recommended alternative temperature criteria of 225°F for off-normal conditions (based on the NRC's recommendations in the RAI) are incorporated into the PFSF Design Criteria on concrete temperatures for the TranStor storage cask. See SAR at Table 3.6-1. In addition, the TranStor Safety Analysis Report that supports the Applicant's License Application clearly demonstrates that these

alternative criteria, and the accompanying requirements for aggregate materials, are incorporated into the TranStor storage cask design. See TranStor SAR at 4-1 (Table 4.1-1) (showing the 225°F concrete temperature limit for off-normal conditions) and Table 1.2-5 (showing the concrete aggregate specifications for the TranStor storage cask). The State's contention does not address any of these provisions in the Applicant's License Application or the supporting TranStor SAR. Furthermore, Sierra Nuclear Corporation's commitment to use these alternative criteria is clearly indicated in its non-proprietary, publicly-available response to the NRC's RAI. See Response to NRC RAI Letter from McConaghy (Sierra Nuclear Corporation) to Reid (NRC) dated March 11, 1997, at 16.

The TranStor storage cask design complies with these temperature criteria "under off-normal conditions," as presented in the State's contention. See SAR at Table 4.2-6 (showing an inner concrete temperature of 222°F, less than the alternative criteria limit of 225°F, for the "steady-state abnormal hot" off-normal condition); see also TranStor SAR at 4-14 (Table 4.1-1) (showing the same data for the "steady state severe hot" off-normal condition).

The State's contention that the concrete temperatures in the TranStor design exceed "the NRC's recommended limits" for "a worst-case temperature of 125°[F] with maximum solar load, lasting for 12 hours" and "under off-normal conditions" does not address, or challenge the validity of, the results of this calculation in the Applicant's SAR. The State's allegation that the concrete temperatures in the TranStor storage cask design exceed "the NRC's recommended limits" for "a worst-case temperature of 125°[F] with maximum solar load, lasting for 12 hours" and "under off-normal conditions" must

be rejected for failing to address the pertinent portions of the Applicant's License Application and for failing to provide a sufficient basis for a admissible contention.

The State also asserts that the TranStor thermal analysis is deficient because it "do[es] not appear to take into account the heat contributed by the casks themselves," and "does not discuss the problem of heat build-up in the concrete structures." State Petition at 57-58. The State does not provide any additional support for these statements. These two issues are raised by the State as general matters in subcontentions d) and e) above, and are responded to there.

g) Failure to Demonstrate that the Concrete Structure of the HI-STORM Cask is Designed to Withstand the Temperatures at the Proposed ISFSI

The State contends that the License Application is deficient because PFS has not demonstrated that the concrete structure of the HI-STORM cask is designed to withstand the temperatures at the proposed ISFSI. See State Petition at 58-59. Specifically, the State asserts that the concrete temperatures in the HI-STORM thermal analysis "are clearly above the NRC recommended values." See id. The State's contention references the December 17, 1996 letter from the NRC to Sierra Nuclear Corporation (vendor for the TranStor storage cask). See id. The State's contention that the HI-STORM storage cask does not meet the "NRC recommended values" is mistaken and overlooks pertinent portions of the License Application and the supporting HI-STORM TSAR.

The temperature limits for storage cask concrete are different for the HI-STORM and the TranStor storage casks because the concrete serves different functions in the two

storage cask designs. Table 3.6-1, "Summary of PFSF Design Criteria," of the Applicant's SAR clearly shows that the temperature limits for the concrete in the HI-STORM cask are different from those in the TranStor cask. See SAR at Table 3.6-1; see also HI-STORM TSAR at 4.3-3 (Table 4.3.1).

The HI-STORM concrete temperature limits are higher than those for TranStor because the concrete is not relied on for structural integrity in the HI-STORM design, as is the case in the TranStor design. The HI-STORM storage cask "is constructed from a combination of steel and concrete," so that "[c]oncrete . . . is not considered as a structural member, except to withstand compressive loads." HI-STORM TSAR at 1.1-5, 3.3-3 (emphasis added). The use of steel, rather than concrete, to provide structural integrity for the storage overpack is shown in Figure 1.1.3 of the HI-STORM TSAR. This same figure, which shows the use of steel, rather than concrete, is also included in the PFSF Safety Analysis Report. See SAR, Figure 4.2-3. For this reason, the concrete temperature limits are higher for the HI-STORM design than for the TranStor design. The State's contention does not address, nor challenge the validity of, this difference in the two cask designs.

The "NRC recommended values" for concrete temperatures in the letter from the NRC to Sierra Nuclear Corporation (vendor for TranStor) apply when the concrete is relied on for structural integrity of the storage casks at elevated temperatures, as it is in the TranStor design. The State has provided no basis for believing that the letter from the NRC to the TranStor vendor, cited by the State, and the "NRC recommended values" in that letter, are applicable to the HI-STORM storage cask design, which does not rely on

concrete for the structural integrity of the storage cask at elevated temperatures. The State's contention provides no basis whatsoever for inferring that the NRC's recommended temperature values for the TranStor design apply to the HI-STORM design. The State's contention overlooks pertinent portions of the License Application and the supporting HI-STORM TSAR that make the differences in the two designs and the readily apparent differences in the temperature limits. The License Application also clearly shows that the HI-STORM storage cask complies with all the concrete temperature limits applicable to its design. See SAR at 4.2.-14 to 16 (Table 4.2-3); see also HI-STORM SAR at 11.1-2 to 3.

The State's contention that PFS has not demonstrated that the concrete structure of the HI-STORM cask is designed to withstand the temperatures at the proposed ISFSI because the concrete temperatures in the HI-STORM thermal analysis "are clearly above the NRC recommended values" (State Petition at 58) must be rejected for failing to address the pertinent portions of the Applicant's License Application and for failing to provide a sufficient basis for a admissible contention. 10 C.F.R. § 2.714(b).

The State also asserts that the HI-STORM thermal analysis is deficient because it does not "consider the heat generated by the casks themselves" and does not "discuss the reduced effectiveness of convection cooling caused by relatively high air temperatures near the concrete pad." State Petition at 58. The State does not provide any additional support for these statements. The State has raised these two issues as general matters in subcontentions d) and e). The Applicant has addressed these issues.

I. Utah Contention I: Lack of a Procedure for Verifying the Presence of Helium in Canisters

1. The Contention

The State alleges in Contention I that:

> The design of the proposed ISFSI fails to satisfy 10 C.F.R. §§ 72.122(f) and 10 C.F.R. § 72.128(a), and poses undue risk to the public health and safety, because it lacks a procedure, or any evidence of a procedure, for verifying the presence of helium inside spent fuel canisters.

State Petition at 60. The asserted bases for the contention are set forth in three pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows, incorporating the specific allegations in its bases:

> The design of the proposed ISFSI fails to satisfy 10 C.F.R. §§ 72.122(f) and 10 C.F.R. § 72.128(a), and poses undue risk to the public health and safety, because it lacks a procedure, or any evidence of a procedure, for verifying the presence of helium inside spent fuel canisters.
>
> a) The applicant will only test inside of the casks for helium. It has no measures to test for helium content inside the canisters.
>
> b) There exist significant opportunities for human error in filling canisters with helium and the Applicant has no control over fuel packaging.
>
> c) Transportation could cause the welding on the canister lids to open and allow helium to escape.

2. Applicant's Response to the Contention

The State raises a number of issues under Contention I, which we address in turn below.

a) Testing Fuel Canisters for Helium Content

The State asserts that "[b]ecause the helium [in the fuel canisters] will be expected to play a critical role in protecting the fuel from degradation . . . it is important that PFS have and implement some means for verifying the presence of helium in the canister." State Petition at 61. The State claims that this requirement stems from 10 C.F.R. sections 72.122(f) and 72.128(a)(1), which require that systems and components important to safety must be designed to permit inspection, maintenance and testing, and that spent fuel storage systems must be designed with a capability to test and monitor components important to safety. See State Petition at 60 (citing 10 C.F.R. §§ 72.122(f) and 72.128(a)).

This subcontention must be dismissed as seeking to litigate a generic determination established by Commission rulemaking. See Section II.B. supra at 5-7. 10 C.F.R. Section 72.122(f) requires that systems and components important to safety be designed to permit inspection maintenance and testing, and Section 72.128(a)(1) requires that spent fuel storage and handling systems be designed with a capability to test and monitor components important to safety. However, the NRC has made generic determinations in promulgating 10 C.F.R. Part 72 and certifying and approving spent fuel casks under Subpart L of Section 72 that, while the canister into which the spent fuel is loaded is a component important to safety (58 Fed. Reg. 17,948, 17,954 (1993)) (Addition to List of Approved Spent Fuel Storage Casks) (SAR at 3.4-3), because the canister is filled with helium and double-seal welded shut, the risk of penetration of the canister from the inside is so low that there is no need to inspect the canister for leaks or

corrosion or to ensure that the helium remains inside. See 59 Fed. Reg. 65,898, 65,901 (1994) (Additions to List of Approved Spent Fuel Storage Casks) (discussing the NUHOMS canister); 10 C.F.R. § 72.214 (List of approved spent fuel storage casks). On the other hand, the NRC has determined that monitoring of the casks is required: "the NRC considers that other forms of [cask] monitoring, including periodic surveillance, inspection and survey requirements . . . during the use of canisters with seal weld closures can adequately satisfy NRC requirements." 59 Fed. Reg. at 65,902; 55 Fed. Reg. 29,181, 29,188 (1990) (Part 72, Statement of Considerations); see 58 Fed. Reg. at 17,954. Therefore, the Applicant need not have procedures for inspecting the canisters and this subcontention is "barred as a matter of law" for attacking a generic determination made by the NRC. See Section II.B. supra at 5-8. Finally, this subcontention must be dismissed because the documents the State cites as its bases do not support the point for which they are urged. See Section II.C.1. at 13-14.

(i) Canister inspection

Spent fuel cask systems with helium-filled canisters double-seal welded shut need not have the canisters inspected for leaks or corrosion. "In instances involving welded closures, the [NRC] [S]taff has previously accepted that no closure monitoring system is required." NUREG-1536, Standard Review Plan for Dry Cask Storage Systems at 7-3 (January 1997). "Casks enclosed entirely by welding do not require seal monitoring." Id. at 7-4. The NRC has applied this guidance when certifying spent fuel storage cask systems. See 59 Fed. Reg. at 65,901 (discussing the NUHOMS canister); 58 Fed. Reg. at 17,954 (discussing the VSC-24 canister). Therefore, because the Applicant's canisters

are of similar designs, the Applicant's canisters also need not be inspected for leaks and corrosion. Compare Holtec's HI-STORM 100 Topical Safety Analysis Report (TSAR) at 7.1-1; SAR at 3.1-1 (Applicant's ISFSI will employ HI-STORM 100 cask systems). After the spent fuel assemblies are loaded into the canisters at reactor sites, the canisters are filled with helium and welded shut with a double-seal weld. See HI-STORM 100 TSAR at 8.1-2 to 8.1-3; 55 Fed. Reg. at 29,188 (inert cover gas required by regulation); 58 Fed. Reg. at 17,954 (discussing the VSC-24 canister). "The strength of [double-seal] welds meet[s] ASME Boiler and Pressure Vessel Code criteria," 58 Fed. Reg. at 17,953; HI-STORM 100 TSAR at 1.1-5,[30] and "the confinement integrity is established by ASME code test procedures" prior to loading the canister into a shipping cask. 58 Fed. Reg. at 17,960; HI-STORM 100 TSAR at 12.3-17; see also NUREG-1536 at 7-5. "The primary reason for requiring the use of ASME section III instead of other standards is to ensure the confinement of [gaseous] fission products." 58 Fed. Reg. at 17,954; HI-STORM 100 TSAR at 7.1-1; see 59 Fed. Reg. at 65,901. Furthermore, the NRC has determined that "[t]here are no known long-term degradation mechanisms which would cause the [welded] seal to fail within the design life of the [canister] . . . ." 59 Fed. Reg. at 65,902. See also 58 Fed. Reg. at 17,954. "Laboratory experiments [with stainless steels similar to that used in the canister] have indicated . . . [that] the expected corrosion would . . . not

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30 [The canister] is an integrally welded pressure vessel designed to meet stress limits of the ASME Boiler and Pressure Vessel Code, Section III, Subsection NB. The [canister] defines the confinement boundary for the stored spent nuclear fuel assemblies and radioactive material with respect to 10 C.F.R. 72 requirements and attendant review considerations.

HI-STORM 100 TSAR at 1.1-5. "A closure ring serves to provide a redundant welded seal at the top [of the canister]." Id. at 3.1-12.

result in exceeding a corrosion depth of 0.0005 inches [over the 50-year design life of the canister]." 59 Fed. Reg. at 65,902; see HI-STORM 100 TSAR at 3.4-1; 58 Fed. Reg. at 17,954. Hence, "the internal helium atmosphere will remain stable" and "periodic inspections for deterioration of the [canister] are not considered necessary". 59 Fed. Reg. at 65,902.

While the canister and the cask are systems important to safety, unlike spent fuel pool cooling water systems or ventilation systems that may require monitoring with instrumentation to ensure proper functioning, the canister and cask are passive systems for which cask temperature monitoring and surveillance activities are sufficient to protect the public health and safety and meet regulatory requirements. See 58 Fed. Reg. at 17,954; 59 Fed. Reg. at 65,902. In accordance with the NRC's determination regarding double-seal welded fuel canisters, the Applicant need not inspect its fuel canisters. Therefore, the State's subcontention to the contrary is "barred as a matter of law" for attacking such determination. Diablo Canyon, LBP-93-1, 37 NRC at 30.

(ii) State's Documents Fail to Support Contention.

This contention must also be dismissed because the supporting document cited by the State (NRC Regulatory Guide 3.48) discusses the requirements for an monitored retrievable storage (MRS) installation; it is inapposite to the licensing of the Applicant's ISFSI because of the fundamental differences between the two types of facilities. See, e.g., 51 Fed. Reg. 19,106, 19,107 (1986) (Part 72, Proposed Rules, adding MRSs to Part 72). An ISFSI, and specifically the Applicant's ISFSI, is only intended to store spent fuel

and other radioactive materials associated with spent fuel storage. Id.; 10 C.F.R. § 72.3; SAR at 3.1-4. An MRS, by contrast, is also intended to store high-level radioactive waste and, potentially, to handle and repackage spent fuel and high-level waste. 10 C.F.R. § 72.3; 51 Fed. Reg. at 19,107. Its operations could include the loading, unloading, and decontamination of spent fuel containers or the disassembly of fuel bundles and the consolidation of the fuel into special storage or transportation containers. 58 Fed. Reg. 29,795, 29,797 (1993) (Part 72, Proposed Rules). Because the potential fuel and waste handling and repackaging operations at an MRS are sufficiently different from, and riskier than, those at an ISFSI, the NRC has placed more stringent emergency planning requirements on the MRS, requiring an offsite component to the emergency plan. Id.; compare 10 C.F.R. §§ 72.32(a) and (b). Thus, the State's reference, which cites operations such as "spent fuel . . . transfer, . . . fuel assembly-disassembly, placement of spent fuel in a container, container sealing and testing, . . . and damaged fuel element containerization" (State Petition at 60-61 (quoting Reg. Guide 3.48 at § 4.7)) simply does not apply to an ISFSI. If documents cited by an intervenor do not support the point for which they are urged, the contention lacks a cognizable basis. See Section II.C.1 at 13-14. Therefore, this subcontention should be dismissed.

b) Human Error in Filling the Fuel Canisters

The State claims that "the nature of the materials and operations involved in packaging fuel for shipment to the ISFSI create significant opportunities for human error in filling the casks with helium, thus making [verification of the presence of helium] all the more important." State Petition at 61. The State also alleges that "it is possible" that

air could be introduced while the canister is filled with helium. Id. Because of the potential for error and "because PFS lacks control over the filling operation," PFS must have the capability to verify the presence of helium in the canisters. Id. at 62.

First, this subcontention must be dismissed because it alleges that fuel packaging operations "create significant opportunities for human error" and that there exists the "potential for error" in the filling of the canisters with helium without providing any "references to those specific sources and documents . . . on which the petitioner intends to rely to establish [said] facts or expert opinion." 10 C.F.R. § 2.714(b)(2)(ii). See Petition at 61, 62. The State cites no references whatsoever in making its allegations regarding the potential for error and canister operations. See State Petition at 61-62. Therefore, this subcontention must be dismissed.

Second, the State's allegation that the Applicant needs to verify the presence of helium because the Applicant would be unable to maintain quality control over canisters packaged and sealed at reactors has already been addressed in response to State Contention G. The subcontention must be dismissed as a collateral attack on the NRC's regulations because it implies that the Applicant must have control over the spent fuel cask system loading activity that will take place at reactor sites. See Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), LBP-82-106, 16 NRC 1649, 1656. As discussed in the Applicant's response to Contention G, supra, however, this is not the case because the reactors are required to have NRC-approved Quality Assurance ("QA") programs of their own. See 10 C.F.R. §§ 50.34(a)(7), 50.34(b)(6)(ii). The reactor QA programs will apply to cask system loading and they must include

provisions to control and audit the procedures used to load the fuel cask systems. 10 C.F.R. Part 50, App. B. Thus, while the Applicant may not have control over the fuel cask systems while they are at the reactor sites, the reactors will have control over the systems. Moreover, the State may not assert that the reactors will not implement such programs because a petitioner may not assert that an NRC licensee will violate NRC regulations without "some particularized demonstration that there is a reasonable basis to believe [the licensee] would act contrary to their explicit terms." General Public Utilities Nuclear Corporation (Oyster Creek Nuclear Generating Station), LBP-96-23, 44 NRC 143, 164 (1996). The State makes no such demonstration here. See State Petition at 62. Therefore, this subcontention must be dismissed as an impermissible collateral attack on the Commission's rules for advocating stricter requirements than those imposed by the regulations.

To the extent that one might infer from this subcontention that the reactors' QA programs would be *incapable* of ensuring the quality of the packaging of the spent fuel such that the Applicant must verify the presence of helium in the canisters, see State Petition at 61-62 (fuel packaging "creates significant opportunities for human error" and there is "potential for error" in the operation), the subcontention must also be dismissed. First, the scope of a contention is defined by its literal terms. Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-947, 33 NRC 299, 371-72 (1991) ("if [the petitioner] intended to raise a training issue, it should . . . have said so explicitly in the contention"). Moreover, "the Board may not make factual inferences on [a] petitioner's behalf." Georgia Institute of Technology (Georgia Tech Research

Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 305 (1995). The State never mentions the reactors' QA programs in the subcontention. See State Petition at 61-62. Therefore, the Board should not interpret the subcontention to concern the adequacy of the reactors' QA programs. Seabrook, ALAB-947, 33 NRC at 371-72. Second, the subcontention lacks an adequate basis. See 10 C.F.R. § 2.714(b)(2)(iii) (petitioner must provide "supporting reasons for each dispute" with applicant). The State does not address how the relevant QA programs would be inadequate to prevent fuel packaging errors such that the Applicant must verify the presence of helium in the canisters. See State Petition at 61-62. Therefore, this subcontention must be dismissed.

Finally, regarding human error at ISFSIs, the Commission observed the following in the Waste Confidence rulemaking:

> Unlike the accident at the Three Mile Island reactor, human error at a spent fuel storage installation does not have the capability to create a major radiological hazard to the public. The absence of high temperature and pressure conditions that would provide a driving force essentially eliminates the likelihood that an operator error would lead to a major release of radioactivity . . . . In addition, features incorporated in storage facilities are designed to mitigate the consequences of accidents caused by human error or otherwise . . . .

Rulemaking on the Storage and Disposal of Nuclear Waste (Waste Confidence Rulemaking), CLI-84-15, 20 NRC 288, 365 (1984). Moreover, the NRC Staff has accepted standard methods for cask draining, vacuum drying, and filling with helium (including testing for contaminants and repetition of procedures if necessary). See NUREG-1536 at 8-4 to 5. This undermines further the State's allegation that "the nature

of the materials and operations involved in packaging fuel for shipment to the ISFSI create significant opportunities for human error," State Petition at 61, and thus this subcontention must be dismissed. Cf. Diablo Canyon, LBP-93-1, 37 NRC at 30 (contentions attacking a generic determination made by the NRC are "barred as a matter of law").

c) Helium Leaks During Transportation

The State claims that "during transportation, the welding on canister lids may loosen," and therefore the Applicant must verify the presence of helium in the canisters. State Petition at 62.

This subcontention, like subcontention (a), must be "barred as a matter of law" for attacking a generic determination made by the NRC. The NRC analyzed cask system designs similar to those the Applicant plans to use -- from the loading of the fuel, to the shipment to an ISFSI, to the interim storage there -- and it has generically determined, in rulemaking, that the helium atmosphere inside the canister is expected to remain and thus it does not require an ISFSI licensee to inspect the fuel canisters. See 59 Fed. Reg. at 65,901-02; NUREG-1536 at 7-4 and 5; supra Subcontention (a).

This subcontention must also be dismissed because the State provides no support whatsoever for its assertion regarding the welds. State Petition at 62. A petitioner must provide "references to . . . specific sources and documents . . . on which the petitioner intends to rely to establish the facts or expert opinion" supporting its basis. 10 C.F.R. § 2.714(b)(2)(ii). Moreover, a petitioner must set forth a "technical basis in references or

expert opinion" in order to support a claim based on an accident scenario. Georgia Tech, LBP-95-6, 41 NRC at 302. Here, the State claims that the integrity of the spent fuel canisters could fail in transportation, yet it sets forth no supporting information at all, see State Petition at 62; thus the subcontention should be dismissed.

J. Utah Contention J: Inspection and Maintenance of Safety Components, Including Canisters and Cladding

1. The Contention

The State alleges in Contention J that:

> The design of the proposed ISFSI fails to satisfy 10 C.F.R. §§ 72.122(f) and 72.128(a), and poses undue risk to the public health and safety, because it lacks a hot cell or other facility for opening casks and inspecting the condition of spent fuel.

State Petition at 63. The asserted bases for the contention are set forth in nine pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows, incorporating the specific allegations raised in its bases.

> The design of the proposed ISFSI fails to satisfy 10 C.F.R. §§ 72.122(f) and 72.128(a), and poses undue risk to the public health and safety, because it lacks a hot cell or other facility for opening casks and inspecting the condition of spent fuel in that:
>
> a) The Applicant's failure to provide a hot cell or other similar facility for the inspection and repair of spent fuel canisters and their contents violates the NRC's general design criteria for ISFSIs, 10 C.F.R. § 72.122(f), and 10 C.F.R. § 128(a), which require that systems and components important to safety be

designed to permit inspection, maintenance, testing and monitoring.

b) The Applicant's failure to include a hot cell in the ISFSI design poses an undue risk to public health and safety. The Applicant's rationale for not including a hot cell appears to be based on invalid assumptions that follow:

   i. It is unreasonable for the Applicant to assume that the spent fuel will be shipped to it in good condition because the Applicant has no control over the packaging process which will be done by eight or more nuclear power plant licensees and which is an inherently complex process with the potential for errors. Also, it is possible that the canister will be damaged in transit to the ISFSI and that accidents may happen at the PFSF which require a hot cell.

   ii. It is unreasonable for the Applicant to assume that it is capable of detecting unacceptable levels of contamination on canisters. It is impossible to take smear samples of non-shielded parts of the canister, which may be contaminated, because they are too radioactive for workers to approach. PFS has no effective means of determining whether the canisters are contaminated or of removing the contamination.

   iii. It is unreasonable for the Applicant to assume that casks that are found to be degraded or contaminated can be safely shipped back to the originating licensee. The risk from an accident during return transportation and handling may be significantly increased if the condition of the spent fuel is degraded or the cask contaminated. Additionally, vibration during transportation may shake loose any contamination on the canisters and pose a risk to workers handling the returned cask.

2. Applicant's Response to the Contention

The State raises a number of issues in Contention J, which we address in turn below.

a) Regulatory Requirements of 10 C.F.R. Sections 72.122(f) and 72.128(a)

The State asserts that the Applicant's ISFSI must be designed with a hot cell or other similar means for opening the spent fuel casks and inspecting the condition of the spent fuel in order to satisfy the general design criteria for ISFSIs, 10 C.F.R. §§ 2.122(f), 72.128(a), which require that systems and components important to safety be designed to permit inspection, maintenance and testing. State Petition at 63. According to the State, the spent fuel cladding and the canisters into which the spent fuel will be loaded are such components. Id. at 63-65.

10 C.F.R. Part 72.122(f) requires that components important to safety be designed to permit inspection maintenance and testing, and 10 C.F.R. § 72.128(a)(1) requires that spent fuel storage and handling systems be designed with a capability to test and monitor components important to safety. However, the NRC has made generic determinations in promulgating 10 C.F.R. Part 72 and certifying and approving spent fuel casks under Subpart L of 10 C.F.R. Part 72 that 1) there is no need to inspect the fuel cladding once a canister is filled with helium and sealed, since the canister serves as a means of confinement in lieu of the cladding (51 Fed. Reg. 19,106, 19,108 (1986) (Part 72, Proposed Rule) (citing NUREG-1092); and 2) while the canister into which the spent fuel is loaded is a component important to safety, 58 Fed. Reg. 17,948, 17,954 (1993)

(Addition to List of Approved Spent Fuel Storage Casks). Because the canister is filled with helium and double-seal welded shut (SAR at 3.4-3), the risk of penetration of the canister from the inside is so low that there is no need even to inspect the canister for leaks or corrosion, let alone open it up to inspect the condition of the fuel. See 59 Fed. Reg. 65,898, 65,901 (1994) (Addition to List of Approved Spent Fuel Storage Casks) (discussing the NUHOMS canister); 10 C.F.R. § 72.214 (List of approved spent fuel storage casks). On the other hand, the NRC has determined that monitoring of the casks is required: "the NRC considers that other forms of [cask] monitoring, including periodic surveillance, inspection and survey requirements . . . during the use of canisters with seal weld closures can adequately satisfy NRC requirements." 59 Fed. Reg. at 65,902, 55 Fed. Reg. 29,181, 29, 188 (1990) (Part 72, Statements of Consideration); see 58 Fed. Reg. at 17,954. Therefore, the Applicant's ISFSI need not have a hot cell for inspecting the fuel or the canisters and this subcontention is "barred as a matter of law" for attacking a generic determination made by the NRC. See Section II.B. supra at 5-8. Moreover, this subcontention must be dismissed because the documents which the state cites as its bases do not support the point for which they are urged.)

Cladding Inspection. The NRC has analyzed the impact on storage and handling operations of the cladding being allowed to deteriorate. See 51 Fed. Reg. at 19,108 (citing NUREG-1092). The NRC has determined that "for storage of spent fuel the cladding need not be maintained if additional confinement is provided . . . . the canister could act as a replacement for the cladding." Id. Thus, if the cladding need not be maintained, it need not be inspected, and the fuel canister need not be opened.

Canister Inspection. Spent fuel cask systems with helium-filled canisters double-seal welded shut need not have the canisters inspected for leaks of corrosion. See discussion in Applicant's Response to Contention II, § 2(a)(i) supra.

This contention must also be dismissed because the supporting documents cited by the State (NRC Regulatory Guide 3.48, NUREG-1092, and DOE/RW-0402) discuss the requirements for a monitored retrievable storage ("MRS") installation; they are inapposite to the licensing of the Applicant's ISFSI because of the fundamental differences between the two types of facilities. See, e.g., 51 Fed. Reg. at 19,107. An ISFSI, and specifically the Applicant's ISFSI, is only intended to store spent fuel and other radioactive materials associated with spent fuel. Id.; 10 C.F.R. § 72.3; SAR at 3.1-4. An MRS, by contrast, is also intended to store high-level radioactive waste and potentially to handle and repackage spent fuel and high-level waste. 10 C.F.R. § 72.3; 51 Fed. Reg. at 19,107. Its operations could include the loading, unloading, and decontamination of spent fuel containers or the disassembly of fuel bundles and the consolidation of the fuel into special storage or transportation containers. 58 Fed. Reg. 29,795, 29,797 (1993) (Part 72, Proposed Rules). Because the potential fuel and waste handling and repackaging operations at an MRS are different enough from and sufficiently riskier than those at an ISFSI, the NRC has placed more stringent emergency planning requirements on the MRS, requiring an offsite component to the emergency plan. Id.; compare 10 C.F.R. § 72.32(a) with § 72.32(b). Thus, the State's references to inspection and monitoring requirements for an MRS simply do not apply to an ISFSI and the contention lacks a cognizable basis. See Vermont Yankee Power Corporation

(Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29, 48 (1989), vacated in part on other grounds and remanded, CLI-90-4, 31 NRC 333 (1990). Therefore, this contention should be dismissed.

b) Undue Risk to Public Health and Safety

The State asserts that the failure to include a hot cell in the ISFSI design poses an undue risk to public health and safety, following from three allegedly unreasonable assumptions on the part of the Applicant. See State Petition at 67.

(i) Verification of Fuel Condition

The State first claims that the Applicant's ISFSI requires a hot cell for inspecting and repairing fuel canisters because the Applicant will not be able to ensure that the fuel canisters will arrive at the ISFSI in good condition. Id. As a basis for its claim the State asserts that the Applicant will have no control over the packing of the canisters and loading of casks at reactor sites and that such operations "may be carried out without proper controls or inspections." Id. (citing State Contention G). Furthermore, the State asserts that such operations are complex and present the potential for error. Id. The State goes on to cite three past incidences of cask loading problems. Id. at 68.

The State's allegation that the spent fuel canisters might need to be repaired in a hot cell because the Applicant would be unable to maintain quality control over canisters packaged and sealed at reactors has already been addressed in Applicant's response to State Contention G. The subcontention must be dismissed as a collateral attack on the NRC's regulations because it implies that the Applicant must have control over the spent fuel cask system loading activity that will take place at reactor sites. As discussed in

Applicant's response to Contention G, however, this is not the case because the reactors are required to have NRC-regulated QA programs of their own. 10 C.F.R. §§ 50.34(a)(7), (b)(6)(ii). The reactor QA programs will apply to cask system loading and they must include provisions to control and audit the procedures used to load the fuel cask systems. 10 C.F.R. § 50, App. B. Thus, while the Applicant may not have control over the fuel cask systems while they are at the reactor sites, the reactor licensees will. Moreover, the State may not assert that the reactor licensees will not implement such programs because a petitioner may not assert that an NRC licensee will violate NRC regulations without some particularized demonstration that there is a reasonable basis to believe that the licensee would act contrary to their explicit terms. General Public Utilities Nuclear Corporation (Oyster Creek Nuclear Generating Station), LBP-96-23, 44 NRC 143, 164 (1996). The State makes no such demonstration here. See State Petition at 67-68. Therefore, this subcontention must be dismissed as an impermissible collateral attack on the Commission's rules for advocating stricter requirements than those imposed by the regulations.

To the extent that one might infer from this subcontention that the reactor licensee's QA programs would be incapable of ensuring the quality of the packaging of the spent fuel without the Applicant disassembling and inspecting the cask components in a hot cell at the ISFSI (see State Petition at 67-68 (fuel packaging "presents the potential for error" and is "subject to human error")), the subcontention must also be dismissed. First, the scope of a contention is defined by its literal terms and the State never mentions the reactor licensees' QA programs in the subcontention. See State Petition at 67-69.

Second, the subcontention lacks an adequate basis. The State does not address how the relevant QA programs would be inadequate to prevent fuel packaging errors such that the Applicant's ISFSI would require a hot cell. State Petition at 67-69. The fuel mis-packaging incidents cited by the State (see State Petition at 68-69) do not suffice as supporting reasons because the State does not link them to the reactor licensee's QA programs or QA generally.

Moreover, even if it could be inferred that the State had asserted that the reactor QA programs would be inadequate to prevent fuel packaging errors, and could consider the mis-packaging incidents as ostensible bases, the incidents would be insufficient to support the State's assertion. See, e.g., Philadelphia Electric Company (Limerick Generating Station, Units 1 and 2), ALAB-819, 22 NRC 681, 728-29 (1985). Even when occurring at the same facility, a number of isolated QA violations does not show a pervasive breakdown in quality assurance sufficient to raise doubt regarding the overall safety of the facility. Id.; compare Cleveland Illuminating Electric Company (Perry Nuclear Power Plant, Units 1 & 2), LBP-83-80, 18 NRC 1404, 1406 (1980) (abnormal number of apparently related QA deficiencies does give rise to litigable issue). Here, the State's three incidents occurred at three different places over a period of 12 years and they are technically unrelated. See State Petition at 68-69. Such isolated and unrelated events do not give rise to a litigable issue concerning the adequacy of the reactor licensees' QA programs. See Limerick, ALAB-819, 22 NRC at 728-29. Thus, even an implied assertion that inadequacies in the reactor QA programs require the Applicant's

ISFSI to possess a hot cell would be unsupported by an adequate basis and must not be admitted.

The State's last basis for its subcontention that the ISFSI requires a hot cell is that "accidents may occur" at the ISFSI and "it is quite possible to warp" or "otherwise damage" the canister in an accident. State Petition at 69. Yet, the State provides no specificity or support for these assertions other than a footnote where the Contention J is introduced that states that "[t]his contention is supported by the Declaration of Marvin Resnikoff, attached hereto as Exhibit 2." Id. at 63. But, in fact, neither the Contention nor Exhibit 2 provides any facts or technical analyses to support this claim. The petitioner here has failed to provide the requisite basis, and, thus, the subcontention should be dismissed.

(ii) Detection and Control of Contamination

The State claims that the Applicant's ISFSI requires a hot cell because the Applicant will not be "capable of detecting unacceptable levels of contamination" on canisters. State Petition at 69-70. As a basis for its claim the State asserts that the Applicant will not be able to take smear samples of non-shielded parts of the canister, which may be contaminated, because they are too radioactive for workers to approach. Id. at 70. Furthermore, the State asserts that Applicant has no effective means of determining whether the canisters are contaminated, or of removing the contamination, and that a hot cell is needed to decontaminate the canister. Id. This contention must be dismissed for lack of basis, for ignoring relevant information in the SAR and for failure to state a claim for which the State would be entitled to relief.

The Applicant's SAR states that "[a] contamination survey for removable surface contamination shall be taken on the accessible external surfaces of the canister." SAR at 10.2-14; see also LA, Appendix A, Section 3/4.1 at TS-19), and that accessible surfaces of the canister are the "canister lid and approximately 3 to 6 inches on canister sides down from the lid" depending on that defined by the vendor SARs. SAR at 6.1-1. The State does not say why this sampling is not representative or inadequate except to assert that "other parts of the canisters [which are not shielded] may be contaminated in the spent fuel pool at the reactor, during the initial packaging of spent fuel" and that "vibrations" during transportation "will shake loose radioactive contamination from metal pores." State Petition at 70. Both are insufficient to support the contention for the following reasons:

With respect to the first point -- that other parts of canister may be contaminated during initial packaging -- the State ignores relevant information in the SAR concerning the extensive measures, including design concepts and contamination measurements, implemented at the originating nuclear power plant to ensure that the canisters are not contaminated upon being shipped to the PFSF. The SAR states that

> [t]he potential for radionuclide contamination of the outside surface of the canisters is minimized by using design concepts that preclude intrusion of spent fuel pool water into the annular gap between the transfer cask and the canister while they are submerged in the pool water at the originating nuclear power plants, as described in Chapter 7 of the HI-STAR and TranStor shipping cask Safety Analysis Reports (SARs) . . . and Chapter 8 of the HI-STORM and TranStor storage cask SARs . . . Health physics surveys required to be performed at the originating nuclear power plants, following removal of loaded canisters from the spent fuel pools, include a smear survey to assess removable contamination levels on accessible surfaces of

> the canister (canister lid and approximately 3 to 6 inches on canister sides down from the lid) and the interior of the transfer cask. In the event removable contamination levels, measured on accessible canister surfaces or inferred from levels measured inside the transfer cask, exceed the criteria specified in Chapter 10, the canister will not be released for shipment to the PFSF.

SAR at 6.1-1 through 6.1-2 (emphasis added).

Because petitioner has ignored relevant material submitted by the Applicant, the contention must be dismissed.

With respect to the claim that vibration may shake loose radioactive contamination, the State's contention does not address why the Applicant's representative sampling is inadequate to identify this effect, even assuming it were to occur. The State is obligated to provide the technical analyses and expert opinion or other information showing why its bases support its contention. Here, nothing in the contention or the referenced Declaration of Marvin Resnikoff provides any such showing, with supporting facts or technical analyses, as is necessary to support a contention. Thus, this contention must be dismissed.

Finally, this subcontention must be dismissed because, even assuming that the State could prove that PFS could not detect contaminated canisters, it would not be entitled to the relief it requests -- the requirement that PFS install a hot cell. The SAR analyzes the health and safety consequences of postulated contamination of the canisters -- which will be stored in storage casks -- and shows that any subsequent releases are well within the NRC safety limits. SAR § 8.1.5.3. The State has made no showing that this analysis is incorrect or, indeed, any recognition that Applicant has included this analysis

in the SAR. Thus, even assuming the canisters were contaminated, the State would not be entitled to any relief it seeks and the contention must be dismissed.[31]

(iii) Returning Defective Casks is Unsafe

The State claims that the PFSF requires a hot cell because the Applicant will not be able to safely ship "casks [that] are found to be degraded or contaminated . . . back to the originating licensee," citing SAR at 7.2-11. State Petition at 71. As a basis for its claim, the State asserts that the risk from an accident during return transportation and handling may be significantly increased if the condition of the spent fuel is degraded or the cask contaminated. Id. Furthermore, the State asserts that vibration during transportation may shake loose any contamination on the canisters and pose a risk to workers handling the returned cask. Id.

The State's claim is based on a misinterpretation of the cited SAR provision, and further ignores relevant information that is contained in the SAR. The particular SAR location cited by the State is addressing a canister - - not a shipping cask - - that exceeds the specification limits for external surface contamination. The SAR states that

> [o]nce the shipping cask arrives at the PFSF and its closure is removed, a smear survey of accessible portions of the canister is again performed.[32] If removable surface contamination levels on the top of the canister exceed the limits specified in Section 10.2.2.1 (22,000 dpm/100 cm^2

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[31] The State also claims in this subcontention that "[i]t would be highly improper to send a cask with smearable contamination above regulatory limits back on the rails and highways." State Petition at 70-71. The Applicant responds to these assertions in Utah Contention J subpart (b)(iii), which addresses this same topic.

[32] Health physics smear surveys are performed at the originating nuclear power plant on the accessible surfaces of the canister and the interior of the transfer cask to assess removable contamination levels prior to release of the shipment. See SAR at 6.1-1.

> beta/gamma and 2,200 dpm/100 cm^2 alpha), the canister is returned to the originating nuclear power plant for decontamination.

SAR at 7.2-11 (emphasis added). This provision of the SAR is in accordance with the acceptance criteria defined in the technical specification regarding "Canister External Surface Contamination." See LA, Appendix A, Section 3/4.1 at TS-19). If a canister exceeds the limits in the specification, then the canister will be returned in its shipping cask to the originating nuclear power plant for decontamination; the canister will not be decontaminated at the PFSF. See SAR at 6.4-1.

To the extent that this contention could be interpreted to claim, based on the State's reference to the SAR at 7.2-11, that contaminated canisters cannot be shipped safely back to the originating reactor, it must be rejected as an impermissible attack on NRC regulations. The canister is not shipped as a stand alone unit. Prior to return, the shipment (shipping cask and its contents) is required to comply with applicable DOT and NRC regulations. The shipping cask is a 10 C.F.R. Part 71 certified package that is required to be designed to ensure containment of any radioactive material, including any external surface contamination on a canister, and prevent release of the material to the environment. See 10 C.F.R. Part 71 Subpart E; see also SAR at 5.1-8.[33]

In promulgating the shipping cask requirements, the NRC determined that such casks, including the provisions to protect against accidental criticality at 10 C.F.R. §

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[33]In accordance with these regulatory requirements, the canister is not considered part of the 10 C.F.R. Part 71 containment boundary for the TranStor and HI-STAR transportation cask systems. See HI-STAR 100 SAR at 4.1-1 and TranStor at 1-12, 4-1.

71.55 and 10 C.F.R. § 71.59, adequately protect public health and safety of spent fuel while in transit. See 31 Fed. Reg. 9941, 9941 ("Packaging of Radioactive Material For Transport" - Final Rule) (July 22, 1966); 30 Fed. Reg. 15,750 ("Transport of Licensed Material, Notice of Proposed Rulemaking") (December 21, 1965). Therefore, a contention that shipping contaminated canisters in NRC-approved shipping casks in compliance with applicable regulatory requirements is unsafe constitutes a direct challenge to the regulations and the NRC's generic determination made as part of the rulemaking. A contention may not attack a Commission rule or regulation. See Section II.B. supra at 5-8. Therefore such a contention must be dismissed.

To the extent that this contention could be interpreted to claim that the Applicant will transport contaminated or defective shipping casks, it must be rejected for lack of basis. Clear regulatory constraints preclude a licensee from releasing for shipment a shipping cask with contaminated external surfaces above certain limits. See 49 C.F.R. § 173.443 and 10 C.F.R. § 71.87(i). A contention premised on the proposition that a licensee will violate regulatory requirements must be rejected.

Moreover, the SAR makes no mention of returning degraded or contaminated shipping casks to the originating licensee, as asserted by the State. See State Petition at 71. To the contrary, the SAR specifically provides that

> [i]f shipping cask repair or maintenance activities are necessary, they will be conducted at the Operation and Maintenance Building or at a vendor designated location.

SAR at 4.5-3. Additionally, the Applicant provides a means for removing surface contamination from a shipping cask even though such an event is not probable. Under

off-normal conditions in which contamination of equipment or structures are encountered, contamination would be removed by use of dry decontamination methods (e.g., paper wipes or rags). Id. at 4.4-1. A contention may not ignore relevant material submitted by an applicant. Here, the State has ignored the provisions in the Applicant's SAR that provide for repair of a damaged or degraded shipping cask and provide a means for removing surface contamination from a shipping cask and thus the contention must be dismissed.

Further, the State claims that the risk from an accident during return transportation and handling may be significantly increased if the condition of the spent fuel is degraded or the cask contaminated and that vibration during transportation may shake loose any contamination on the canisters and pose a risk to workers handling the returned cask. See State Petition at 71. The claim that accidents may be increased if the condition of the spent fuel is degraded is directly contrary to the generic determinations made by Commission discussed above. The State has provided no basis, as discussed above, to show that Applicant would ship contaminated casks.

As for the claim that vibration during transportation may shake loose any contamination on the canisters and pose a risk to workers handling the returned cask, the State has provided no factual basis to show that the radiological protection programs of the originating reactor will not be capable of protecting the workers. The originating plant will be on notice that canister is being returned because it is contaminated. There is no reason to believe -- and the State has supplied none -- that the NRC approved and audited radiological protection programs will not adequately protect worker safety.

Neither the contention nor Exhibit 2, the referenced Declaration of Marvin Resnikoff, provides any basis to show that worker safety will not be protected. Here, the State has failed to provide any basis and thus the Contention must be dismissed. Moreover, the State's claim in effect challenges the adequacy of 10 C.F.R. Part 50 licensee radiological protection programs which is beyond the scope of this proceeding.

K. Utah Contention K: Inadequate Consideration of Credible Accidents.

1. The Contention

The State alleges in Contention K that:

> The Applicant has inadequately considered credible accidents caused by external events and facilities affecting the ISFSI, intermodal transfer site, and transportation corridor along Skull Valley Road, including the cumulative effects of nearby hazardous waste and military testing facilities in the vicinity.

See State Petition at 72. The asserted bases for the contention are set forth in several pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows, incorporating the specific allegations raised in its bases:

> The Applicant has inadequately considered credible accidents caused by external events and facilities affecting the ISFSI, intermodal transfer site, and transportation corridor along Skull Valley Road, including the cumulative effects of the nearby hazardous waste and military testing facilities in the vicinity in that:
>
> a) PFS has failed to adequately consider the effects of an explosion at the Tekoi Rocket Engine Test Facility on the ISFSI or on casks in transit.

b) PFS has failed to consider the crash impacts of airflights and related hazards on the site in the following ways:

(i) PFS has failed to consider the risks and hazards of military aircraft landing with "hanging bombs" and the potential for sabotage of aircraft.

(ii) PFS has failed to specify the in-flight crash rate per mile used in its aircraft crash probability calculation.

(iii) PFS has failed to consider the cumulative effects of air crashes, in particular, military security and training flights, flights of the X-33 hydrogen powered space plane, and civilian aircraft.

(iv) PFS has failed to analyze potential risks from the North and South Utah Test and Training Range which is used for air-to-air and air-to-ground live munitions training.

c) PFS has not evaluated the risks posed by aircraft accident scenarios with respect to the intermodal transfer facility (ITF) or transportation to the PFSF.

d) PFS has failed to evaluate accident scenarios involving chemical agents transported by the Dugway Proving Ground on Skull Valley Road.

e) PFS has failed to evaluate potential cumulative effects of concurrent transport of spent fuel and other hazardous materials in the region.

f) PFS must address impacts of accidental releases from nearby military and industrial facilities that may cause evacuation of the proposed ISFSI or the ITS.

2. Applicant's Response to the Contention

Contention K pertains to external man-made events which the State claims Applicant has not properly taken into account under the regulations, 10 C.F.R. § 72.94 in

particular. That regulation requires identification and evaluation of the man-made facilities and activities that might endanger the proposed ISFSI. Further guidance is provided by NUREG-1567 which states that

> [t]he locations of nearby nuclear, industrial, transportation, and military installations should be indicated on a map which clearly shows their distance and relationship to the ISFSI. All facilities within an 8-km (5-mi) radius should be included, as well as facilities at greater distances, as appropriate to their significance. For each facility, a description of the products or materials produced, stored or transported should be provided, along with a discussion of potential hazards to the ISFSI from activities or materials at the facilities.

NUREG - 1567 at 2-6; § 2.4.2. (emphasis added).

The State contends in general that PFS has inadequately analyzed the potential risks posed by the surrounding facilities which include various military installations that test rockets, aircraft, and various weapon systems. In fact, PFS has thoroughly considered the potential risks posed by these facilities in section 2.2 of the SAR, entitled "Nearby Industrial, Transportation, and Military Facilities." In accordance with the guidance of the NUREG, all facilities within the 5 mile-radius have been thoroughly evaluated and considered, in particular, the Tekoi Rocket Engine Test Facility. Beyond the 5-mile radius, a number of other facilities and military installations were considered by PFS, in particular, the Dugway Proving Ground. Among other deficiencies, as set forth below, the State has failed to provide sufficient factual bases supporting its postulated accident scenarios and therefore has failed to establish that these scenarios

present threats of credible accidents. In short, the State has failed to put forth a contention that should be admitted.

a) Tekoi Rocket Engine Test Facility

The State contends that PFS has failed to adequately consider the effects of an explosion at the Tekoi Rocket Engine Test Facility on the proposed ISFSI or casks in transit to and from the ISFSI. This contention must be dismissed because the (i) State fails to explain how an explosion could affect the ISFSI or spent fuel casks in transit and (ii) the transportation of casks is beyond the scope of this proceeding.

The potential effects of an explosion at the Tekoi Rocket Engine Test Facility were analyzed in PFS's SAR. The SAR states:

> Hickman Knolls, with an elevation of approximately 4873 feet, is situated directly between the PFSF (approximate elevation 4465 feet) and the Tekoi Test facility (elevation 4600 feet). The relative location of Hickman Knolls between the PFSF and Tekoi Test facility, and the distance of 2.5 miles would substantially deflect and disperse overpressures from an explosion at the Tekoi Test facility, precluding any hazard to the PFSF.

SAR at 2.2-1. The State fails to explain the particular respects in which this analysis is deficient and therefore this part of the contention must be rejected. The State has merely asserted that "Applicant has failed to consider possibilities, such as the potential for a static fired rocket motor to escape from the test harness, or the impact of an explosion to reach the ISFSI facility or to impact casks or cask-hauling trucks (or railcars) traveling along the access road, including the type of damage that could result from such rocket motors." State Petition at 74.

But a contention "that simply alleges that some matter ought to be considered" does not provide a sufficient basis for an admissible contention. Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 246 (1993). The State here has provided no factual basis why an explosion at Tekoi should be considered as required by 10 C.F.R. § 2.714(b)(2)(ii). Further, petitioner is obligated "to provide the [technical] analyses and expert opinion" or other information "showing why its [asserted factual] bases support its contention." The State, however, has failed to explain how an explosion occurring at Tekoi could affect the ISFSI, given the distance and elevations cited in the SAR. Also, no explanation of how it could affect casks in transit has been provided by the State. Because subpart (a) of the State's contention fails to meet the threshold admissibility requirements set forth in Rancho Seco, Georgia Tech and Palo Verde, it must be rejected.

Furthermore, transportation issues are beyond the scope of this proceeding. Contentions are not cognizable unless they are material to a matter that falls within the scope of the proceeding for which the licensing board has been delegated jurisdiction as set forth in the Commission's Notice of Opportunity for a Hearing. See Section II.B. supra at 8. The Notice of Opportunity for a Hearing in this case delineates the scope of the present licensing proceeding to include only the consideration of "an application . . . for a materials license, under the provisions of 10 CFR Part 72, . . . to possess spent fuel and other radioactive materials associated with spent fuel storage in an [ISFSI] located on the Skull Valley Goshute Indian Reservation . . . ." 62 Fed. Reg. at 41,099 (1997) (Notice of Opportunity for a Hearing). While ISFSIs are licensed under Part 72, the

transportation of spent fuel is governed by Part 71 and other provisions, but not Part 72. 10 C.F.R. § 71.0. Thus, this part of the State's contention alleging the possibility that an explosion at the Tekoi Rocket Test Facility could impact casks or cask-hauling trucks (or railcars) traveling along the access road must be rejected as beyond the scope of the hearing.

b) Impacts of Airflights on the Site

(i) Potential Sabotage of Airflights and "Hanging Bombs"

Subpart i) claims that the SAR is deficient because it did not consider emergency incidents such as sabotage of airflights from Dugway and "hanging bombs." The concern expressed regarding potential sabotage in this part of the State's contention echoes that of the petitioner in Carolina Power & Light Company (Shearon Harris Nuclear Power Plant, Units 1 and 2), LBP-82-119A, 16 NRC 2069 (1982). In that case, the Licensing Board rejected the petitioner's contention that the applicant's safety analysis was deficient in that it failed to consider the "consequences of terrorists commandeering a very large airplane. . . and diving it into the containment." Id. at 2098. The grounds for rejection were that in accordance with 10 C.F.R. § 50.13, read in pari materia with section 73.1,

> [M]ilitary style attacks with heavier weapons are not a part of the design basis threat for commercial reactors. Reactors could not be effectively protected against such attacks without turning them into virtually impregnable fortresses at much higher cost. Thus, [a]pplicants are not required to design against such things as . . . kamikaze dives by large airplanes, despite the fact that such attacks would damage and may well destroy a commercial reactor.

Id. Applying the same reasoning here, Applicant should not be required to design the PFSF as an impenetrable fortress, impervious to any attack, no matter how incredible the postulated scenario.

The State also asserts that "Air Force bombers must occasionally land at Dugway with 'hanging bombs,' i.e., live ordnance that fails to drop from the plane and is stuck in the bombing bay during air-to-ground combat training." State Petition at 74 (emphasis added). Nowhere, however, does the State quantify what "occasionally" means. Nor does the State contend that at any time a hanging bomb has ever been inadvertently dropped and/or detonated. The fact that, as the State asserts, the aircraft have been able to land with the bombs still in the bombing bay provides no support for the assertion of a credible threat of accident from such a scenario. The State's failure to provide a technical analysis showing how its basis supports this part of the contention is a ground for rejection of this part of its contention. See Georgia Tech Research Reactor, supra, LBP-95-6, 41 NRC at 305.

(ii) Failure to Specify the In-Flight Crash Rate

The Applicant calculated the probability of an aircraft crashing at the site based upon flights from Michaels Air Field at Dugway Proving Ground. SAR at 2.2-3. Airflights from Dugway were used because military airway IR-420 for Dugway passes over the PFSF site area. SAR at 2.2-3. This airway is located within restricted airspace, which means that commercial flights are not allowed in the airspace. Id. Dugway provided information that there are approximately 414 flights annually at Michaels Air

Field. Id. Based on this information, and following the methodology set forth in NUREG-0800, the SAR calculates the probability of an aircraft crash at the site. Id.

The State contends that the "Applicant does not specify the in-flight crash rate per mile used in the aircrash probability calculation." State Petition at 75. The State is, however, mistaken: the in-flight crash rate per mile is clearly specified at page 2.2-3 of the SAR. The SAR expressly states that "its methods of NUREG-0800 were used to estimate the probability of an aircraft impacting its PFSF" and that "NUREG states the in-flight crash rate as 4 E-10 per mile." SAR at 2.2-3. This contention, which mistakenly claims that the Applicant failed to address a relevant issue in the application, must be dismissed. See, e.g., Georgia Power Company (Vogtle Electric Generating Plant, Units 1 and 2), LBP-91-21, 33 NRC 419, 424 (1991).

The State further alleges that "if the in-flight crash rate is not a worse [sic] case rate for all types of aircraft, then the Applicant should calculate the aircraft frequency per aircraft type." State Petition at 76. Again the State ignores relevant information in the SAR and the related NUREG guidance followed by the SAR. Section 3.5.16 of NUREG-0800 provides the probability of aircraft crashes for civilian and military aircraft as a function of distance from the end of the runway. The PFSF is located approximately 12 miles from Michaels Air Field. At distances greater than five miles the probabilities for military aircraft are not listed in NUREG-0800. However, at shorter distances from the runway, commercial aircraft are shown with higher crash probabilities. Therefore, the commercial aircraft inflight crash rate per mile of 4E-10 for distances of 12 miles, as provided in SAR Section 2.2, was used as a conservative, worst case value. Thus, this

contention must likewise be dismissed for failing to recognize and address relevant information in the license application.

(iii) Failure to Consider the Cumulative Effects of Air Crashes

The State also contends that Applicant has failed to take into account in the aircraft crash probability calculation, the cumulative effect of aircraft crashes from flights other than those originating or landing at Michaels Air Field. State Petition at 75-76. In particular, the State asserts that the Applicant should have taken into account commercial flights from Salt Lake City International Airport (SLCI), military training flights, and flights of the X-33 hydrogen powered space plane. As noted above, the airspace over the ISFSI is restricted such that no commercial or private aircraft from SLCI airport can enter. Therefore, any contention involving commercial aircraft must be rejected. In regards to military training and the X-33 aircraft, the State has failed to provide any factual bases to show that inclusion of such flights, even if required, would give rise to a credible accident scenario that would have to be considered under NRC-accepted standards.

ISFSIs are not required to be designed and constructed to meet every imaginable threat no matter how remote. Some threshold level of probability must exist before an accident scenario must be addressed. This common-sense notion has been incorporated into the regulations pertaining to nuclear reactors, in particular with respect to the potential for aircraft accidents. As the licensing board in Consumers Power Company (Big Rock Point Plant), LBP-84-32, 20 NRC 601 (1984) recognized,

> [s]ection 100.10 of 10 C.F.R. requires that reactors reflect through their design, construction, and operation an extremely low probability for accidents that could result in release of significant quantities of radioactive fission products. Accidents attributable to aircraft hazard are encompassed by § 100.10. It is not intended, however, that nuclear power reactors be designed to meet this regulation for all theoretically possible accidents. Accidents of a sufficiently low probability of occurrence may be neglected in reactor design.

20 NRC at 640-41.

Section 2.2.3 of the Standard Review Plan ("SRP") for reactors provides for a minimum threshold for consideration of aircraft accidents of 1E-7, which has been accepted as the applicable threshold standard for NRC licensing. Metropolitan Edison Company (Three Mile Island Nuclear Station, Unit No. 2), ALAB-486, 8 NRC 9, 26 at n. 31, 28 and n. 38 (1978) (accepting the NRC Staff's position that "if the probability of a plane crash can be shown to be less than $1x10^{-7}$ per year, such events are deemed to be of sufficiently low likelihood that their effects may be ignored"). The State has provided no basis for challenging the adequacy of that threshold. Using this criterion, PFS calculated the probability of an aircraft from Michaels Airfield at Dugway Proving Ground impacting the PFSF at less than 5 E-9, which is less than 5% of the minimum threshold probability. This calculation was based on the 414 annual flights from Dugway Proving Ground. The probability per year of an aircraft crashing into the PFSF is calculated by multiplying the number of flights per year along the airway (N), times the in-flight crash rate per mile (C), times the effective area of the PFSF in square miles (A), and dividing

this product by the width of the airway in miles (w). SAR at 2.2-3. Only the first factor, the number of flights, is subject to variation; the other factors are constants.

Therefore, to increase the probability of an aircraft crash at the proposed ISFSI site to the minimum threshold level of concern, the number of flights per year along the airway must increase by a factor of at least twenty. In other words, the number of military flights passing over the PFSF would have to increase from the 414 per year attributable to flights to and from Dugway to over 8,000 per year accounting for other flights that the State claims should be taken into account, those being commercial flights to and from Salt Lake City, military training or security missions from Dugway Proving Grounds and from Hill Air Force Base as well as potential flights in the future by the yet to be built X-33 hydrogen-powered space plane. State Petition at 77. The State, however, provides no factual bases, analyses or expert opinion, with supporting documentation, that would suggest that taking such flights into account would increase the probability of an air crash to the minimum threshold level.

Moreover, civilian overflights originating from, or destined for, Salt Lake City International Airport are properly excluded from the calculation. The State expressly acknowledges that "[t]he mid to southern portion of Skull Valley" -- which encompasses the site -- "is located within restricted military air space." State Petition at 76. It argues, however, that the Applicant should account for commercial air traffic from SLCI because "the [SLCI] Airport <u>may</u> direct approximately 15% of its commercial aircraft through Rush Valley, flight pattern V-257, which runs north and south on the east side of the Onaqui and Stansbury Mountains. The State claims that "because of the close proximity

of flight pattern V-257 to the ISFSI site, the Applicant should evaluate the probability of a commercial aircraft crash into the site." State Petition at 76 (emphasis added). In fact, the "close proximity" of the site is at least 10 miles across the Stansbury Mountain Range. The PFSF is located on the west side of the Onaqui and Stansbury mountain ranges and, therefore, any air traffic that "may" be directed through V-257 will pass nowhere near the site. See License Application, Figure 1-1. Other than asserting that such flights should be taken into account, the State has provided no explanation or support for why such flights are relevant in calculating the probability of an air crash at the site as required under the amended rules of Practice.

Further, although the State contends that the Applicant must account for more flights from other sources, it has provided no facts to support the necessary 8,000 flights per year to reach this threshold of concern. The State has supplied no facts, as required under the Commission pleading rules, to indicate that flights from the other sources mentioned by the State -- the X-33 hydrogen powered space plane and training and security missions from the Hill Air Force Base and Michaels Airfield at Dugway -- would come close to the 8,000 required to exceed the minimum threshold probability. Indeed training flights from Michaels Air Field would already be accounted for in the 414 flights per year used in the calculation of air crash probability. SAR at 2.2-3. Further, the State has failed to quantify such flights and has failed to show to what extent taking them into account would affect the overall outcome of the calculation such that an aircraft crash would even begin to approach the threshold level for a credible accident. PFS should not be forced to litigate something that is pure speculation where the State has come forward

with no facts to support its claim that an aircraft crash from training flights or otherwise is a credible accident scenario.

(iv) Failure to Analyze Potential Risks from North or South Utah Test and Training Ranges

The State also asserts in one sentence that the Application has failed to analyze potential risks from the North and South Utah Test and Training Range ("UTTR") which is used by the U.S. Air Force as a training range for air-to-air and air-to-ground live munitions training. State Petition at 76. The State has not alleged that any military aircraft that practice at UTTR, which is located 18.3 miles from the proposed ISFSI, actually fly over the site. The State has postulated no scenario in which an aircraft flying over the UTTR could impact the ISFSI. To the extent that the State is implying an aircraft crashing into the site, that contention has been addressed in subpart (iii), supra. Although it mentions air-to-air and air-to-ground live munitions training, it postulates to credible scenario in which such exercises could impact the ISFSI. As was discussed in subpart a, supra, "a contention that simply alleges that some matter ought to be considered" does not provide a sufficient basis for an admissible contention. See also, discussion at part d), infra.

c) Failure to Evaluate the Risks Posed by Aircraft Accident Scenarios with Respect to the Intermodal Transfer Facility or Transportation to the PFSF

This part of the State's contention must be dismissed because it is beyond the scope of the proceeding. As stated above, contentions are not cognizable unless they are material to a matter that falls within the scope of the proceeding for which the licensing

board has been delegated jurisdiction as set forth in the Commission's Notice of Opportunity for a Hearing and the Notice of Opportunity for a Hearing in this case delineates the scope of the present licensing proceeding to include only the consideration of "an application . . . for a materials license, under the provisions of 10 CFR Part 72. Accordingly, alleging the possibility of an aircraft accident at the ISF or impacting the casks as they travel on trucks or railcars to the ISFSI must be rejected as beyond the scope of the hearing. See also response to Utah Contention B.

d) Failure to Evaluate Accident Scenarios Involving Chemical Agents Transported by Dugway on Skull Valley Road

This part of the Petitioner's contention must be dismissed as well, for it is nothing more than a bald, conclusory allegation. The State merely speculates that an accident scenario on Skull Valley Road is possible without specifying what chemical agents are transported and without specifying a particular accident scenario. The State has not provided any factual basis for a scenario in which a hazardous chemical agent is released. Nor has the State explained how a chemical agent released on Skull Valley Road would travel to the ISFSI site; moreover, the State has set forth no factual basis whatsoever to support a credible scenario in which a hazardous chemical agent released on Skull Valley Road would have an adverse impact on the ISFSI site.

Georgia Tech, LBP-95-6, 41 NRC at 306-07 (1995), involved a similarly remote and speculative accident scenario. Petitioners in that case raised the contention that in the event of an accidental release from the nuclear reactor at issue, a nearby reservoir would

be vulnerable to "extensive contamination" and that this contamination "would exacerbate the chronic water shortage in the . . . region . . . . Id. The Board ruled that

> [t]his contention about an accidental release contaminating the . . . reservoir is merely an expression of [petitioner's] opinion. No basis is provided for any of these assertions. The Commission's regulations require, *inter alia*, that [petitioner] provide a concise statement of the alleged facts or expert opinion to support the contention, and sufficient information to show that a genuine dispute exists with the Applicant. 10 C.F.R. § 2.714(b)(ii) and (iii). [Petitioner] has not met these requirements.
>
> Specifically, [petitioner] has not provided a concise statement of the alleged facts relating to how an accidental release would occur and how such a release would contaminate the reservoir, nor what expert opinion [petitioner] intends to rely upon to prove the contention. Neither does [petitioner] make any references to any specific sources or documents upon which it intends to rely to prove the contention. Without these showings [petitioner] has not provided sufficient information to demonstrate that a genuine dispute exists with the Applicant regarding the postulated accidental release from the reactor and any subsequent contamination of the reservoir.

LBP-95-6, 41 NRC at 307.

Based on these considerations, the Georgia Tech board ruled the contention inadmissible. Similarly, the State has failed to provide a basis for its assertion of a hypothetical accident involving the transport of a chemical agent on Skull Valley Road that might result in any adverse consequences at the ISFSI site. The State has provided no statement of facts or expert opinion relating to what type of accident might occur, how such an accident would occur and what the impacts on the site would be. In short, this contention is nothing but "an expression of the State's opinion." Id. at 306. The

Petitioner's failure to provide a factual basis for its contention makes the contention inadmissible for the reasons stated in Georgia Institute.

e) PFS Has Failed to Evaluate Potential Cumulative Effects of Concurrent Transport of Spent Fuel and Other Hazardous Materials in the Region

The State asserts that "the Applicant fails to identify, examine or evaluate the potential cumulative effects of the concurrent transport of spent fuel and other hazardous materials in the region . . . . and that "Applicant's proposed activities involving movement of high level nuclear waste increase the potential for accidents associated with the transportation and handling of [hazardous munitions and wastes from other facilities such as the Envirocare low level radioactive and mixed waste landfill, among others]." State Petition at 78.

This subcontention must be dismissed because it makes allegations without providing concise statements of alleged facts or expert opinion, supported by specific sources and documents to establish the facts or expert opinion, that are sufficient to sustain the subcontention's allegations. Specifically, concerning contentions that an application is deficient regarding its analysis of allegedly cumulative environmental effects, the petitioner must specify the effects and must come forward with specific facts and reasons to show that such effects will occur. See Duquesne Light Company (Beaver Valley Power Station, Unit 2), LBP-84-6, 19 NRC 393, 425 (1984). Furthermore, concerning contentions premised on accident scenarios, as this subcontention is, the NRC has strict standards a petitioner must meet to have the contention admitted:

> [W]hen a postulated accident scenario provides the premise for a contention, a causative mechanism for the accident must be described and some credible basis for it must be provided. If a contention claims that an EIS is necessary or inadequate in some respect, the "rule of reason" by which NEPA is to be interpreted provides that agencies need not consider "remote and speculative" risks or "events whose probabilities they believe to be inconsequentially small. In addition, the Supreme Court has . . . held that . . . NEPA does not require a "worst case analysis."

Vermont Yankee Nuclear Power Corporation (Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29, 44 (1989), vacated in part on other grounds and remanded, CLI-90-4, 31 NRC 333 (1990) (citing, e.g., Limerick Ecology Action, Inc. v. NRC, 869 F.2d 719, 739 (3d Cir. 1989); see also Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 354-56 (1989)). Without a "causative accident scenario" and a "credible basis," a postulated accident is "a matter of conjecture, beyond the rule of reason," and thus cannot be considered to be "reasonably foreseeable." Hence, such an accident is not cognizable under NEPA. Vermont Yankee, ALAB-919, 30 NRC at 51 n.30.

This subcontention must be dismissed because the State has come forward with insufficient data and has not provided reasons to show that cumulative environmental effects will occur; moreover its accident scenarios do not have credible bases and thus they are remote and speculative risks. See State Petition at 78. The State merely names the facilities in Tooele County and lists their alleged principal activities. It speculates about the possible accidents those activities might cause, but it provides no data regarding the likelihood of any of those activities or accidents involving the transportation of material from them having an impact on the environment. See id. Thus, there is no

reason to believe that the transportation accident scenario the State postulates is credible. Moreover, the State provides no data whatsoever concerning the incremental environmental effects of the ISFSI. See State Petition at 78. And beyond claiming (wrongly) that the Applicant has not addressed cumulative environmental impacts, the State does not provide any reasons to question the Applicant's assessment. Id. Therefore, because the State has not come forward with reasons to show that the environmental effects of other facilities in Tooele County would be cumulative with those of the ISFSI (i.e., the State has not shown that the accident scenario it postulates is credible), because it has not provided any data on the allegedly incremental effects of the ISFSI, and because it has not shown why the Applicant's assessment of cumulative impacts is wrong, this subcontention must be dismissed. See Vermont Yankee, ALAB-919, 30 NRC at 44; Beaver Valley, LBP-84-8, 19 NRC at 425; Davis-Besse, LBP-87-11, 25 NRC at 293; Rancho Seco, LBP-93-23, 38 NRC at 247; Vogtle, LBP-84-35, 20 NRC at 914.

Furthermore, this subcontention should be dismissed as lacking sufficient information "to show that a genuine dispute exists with the applicant on a material issue of law or fact." See Section II.C.2. supra. The Applicant has addressed the environmental impacts from accidents associated with the transportation of spent fuel related to the PFSF, including intermodal transfer to heavy haul truck. See ER at 5.2. In calculating the number of shipments and traffic density, "[a]ll shipments of spent fuel to and from the PFSF will be by rail, with use of heavy haul trailers between the PFSF and the intermodal transfer point and as necessary between the originating reactor and the

nearest railhead." Calculation Package Vol. II, Tab 21, "PFSF Transportation Impacts," SWEC Calc. No. 05996.01-P-001 at 4. Further, as addressed in Applicant's response to Utah Contention V, Table S-4 in 10 C.F.R. § 51.52 and WASH-1238 incorporate the environmental effects of dual mode transportation and intermodal transfer. See Applicant's Response to Utah Contention V at subpart b. The State ignores Applicant's treatment of the potential for vehicle accident and provides no basis for challenging Applicant's analysis. Thus there is no reason to believe that a genuine dispute exists with the Applicant on a material issue of law or fact. This subcontention, which ignores relevant material submitted by the Applicant, must be dismissed.

f) PFS Must Address Impacts of Accidental Releases from a Facility that may Cause Evacuation of ISFSI or the ITS

The State's contention demands that PFS address the impacts of accidental releases from nearby military and industrial facilities that may cause evacuation of the ISFSI or the ITS. The Applicant opposes the admission of this contention because no credible accident scenario has been postulated by the State that would require evacuation of the facility. As in subpart (d), supra, this contention is merely an expression of the State's opinion, with no factual basis to support it. The State has failed to provide a basis for its assertion of a hypothetical accident that might result in the evacuation of the ISFSI or abandonment of spent fuel casks. No statement of facts or expert opinion relating to what type of accident requiring evacuation might occur, how such an accident would occur and why evacuation of the facility would be necessary. The State's failure to

provide such information makes this part of the contention inadmissible for the reasons stated in the Georgia Tech decision.

L. Utah Contention L: Geotechnical

1. The Contention

The State alleges in Contention L that:

> The Applicant has not demonstrated the suitability of the proposed ISFSI site because the License Application and SAR do not adequately address site and subsurface investigations necessary to determine geologic conditions, potential seismicity, ground motion, soil stability and foundation loading.

State Petition at 80. The asserted bases for the contention are set forth in fifteen pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows, incorporating the specific allegations in its bases:

> The Applicant has not demonstrated the suitability of the proposed ISFSI site because the License Application and SAR do not adequately address site and subsurface investigations necessary to determine geologic conditions, potential seismicity, ground motion, soil stability and foundation loading, in that
>
> a) Surface faulting. The SAR does not provide sufficient supporting evidence of the presence or absence of buried capable faults that have moved at least once within the past 35,000 years or repeatedly within the past 500,000 years as required by the regulations.
>
> - The Applicant's seismic-refraction profiles of buried faults detected at the site can be interpreted to show displacement in more recent times than that determined by PFS.

- These faults, if capable, may produce greater vibratory ground motion than that for which the facility is designed.

- These faults, located beneath the facility, may also pose a threat of surface rupture which must be evaluated in the design of the facility.

- Based on recent Basin and Range province studies by the Nevada Bureau of Mines, PFS needs to extend its evaluation to determine the potential for seismic activity from earthquakes on faults in the site vicinity.

b) Ground Motion. Based on recent studies (Sommerville, et. al.) the site "may also be subject to ground motions greater than those anticipated" by PFS "due to spatial variations in ground motion amplitude and duration because of near surface traces of potentially capable faults."

c) Subsurface Soils

1) Subsurface investigations. The license application lacks rigor needed for determining site suitability and establishing design parameters.

(i) Subsurface location plans showing subsurface soil and rock layering at site are deficient because data cannot be compared to PFS boring logs. There remain questionable interpretations of the soil boring data as used for design values.

(ii) SAR section 2.6 defining geologic features is not complete and is not supported by sufficiently detailed investigations.

(iii) Application does not consider geochemical effects of the environment (weather or rain) on the physical and strength characteristics of the soil and rock at the ISFSI site.

2) Sampling and analysis. PFS sampling program is inadequate to "show that soil conditions are adequate for the proposed foundation loading."

(i) The number of soil tests and analyses are "inadequate to accurately model the expected behavior of the soil foundation under static and dynamic loading."

(ii) The scope of the investigations (sampling and analysis) are insufficient to determine properties of various materials underlying the site.

(iii) Soil test data are insufficient to support selection of design parameters -- e.g., did not include samples taken from each soil strata under each foundation of building or structures.

(iv) Collected field data were not compared with soil information in literature and correlated with other data for similar soils when comparing the shear modulus values.

(v) Application does not provide sufficient information to determine if samples were taken in accordance with acceptable methods and tested in sufficient numbers to define soil and rock parameters needed for characterizing site.

(vi) Descriptions of test results for field and laboratory tests generally are insufficient to allow detailed analysis.

(vii) Lack of detailed discussion of field and laboratory samples preparation for testing prevents independent review and assessment of the quality of data collected.

(viii) PFS should show that all zones that could become unstable because of liquefaction or strain-softening are sampled and tested.

(ix) PFS must show that the static and dynamic engineering properties of soil were properly determined and that reasonable and conservative values were used in design.

3) Physical property testing for engineering analysis. It is not possible to determine if PFS's field and laboratory data have been conservatively interpreted to determine design parameters in accordance with accepted practices.

(i) The data do not fit well together and appear to have been combined without assessing applicability to the site.

(ii) PFS performed only limited soil engineering tests and omitted a number of "widely accepted tests" which would allow a reviewer to make a reasonable judgment on performance of the soil under anticipated loadings.

d) Soil stability and foundation loading. The data collected by PFS and data from the literature do not support the conclusion in the SAR that there is no potential for collapse or excessive settlement of foundation soils at the site. The Applicant did not consider the presence of soluble minerals during the evaluation of adequate soil conditions for the proposed foundation loading as required under 10 C.F.R. § 72.102(d).

2. Applicant's Response to the Contention

The applicant does not oppose the admission of Utah Contention L as restated above.

M. Utah Contention M: Probable Maximum Flood

1. The Contention

The State alleges in Contention M that:

> The application fails to accurately estimate the Probable Maximum Flood (PMF) as required by 10 CFR § 72.98, and subsequently, design structures important to safety are inadequate to address the PMF; thus, the application fails to satisfy 10 CFR § 72.24(d)(2).

State Petition at 96. The asserted bases for the contention are set forth in two pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated incorporating the specific allegations in its bases as indicated below:

> The application fails to accurately estimate the Probable Maximum Flood (PMF) as required by 10 CFR § 72.98, and subsequently, the design of structures classified as "important to safety" are inadequate regarding the PMF; thus, the application fails to satisfy 10 CFR § 72.24(d)(2), in that

a) The drainage area was inaccurately determined to be 26 square miles because PFS fails to account for all drainage sources that impact the ISFSI site during extraordinary storm events.

b) Failure to adequately estimate PMF results in underdesign of the diversion berm, which may lead to a facility not accurately protected from flooding and an underestimate of need to implement emergency plans as well as other consequences important to safety which may occur.

c) Applicant's assertion that the site is "flood dry" may not hold true based on calculations utilizing a larger drainage basin.

2. Applicant's Response to the Contention

The applicant does not oppose the admission of Utah Contention M as restated above.

N. Utah Contention N: Flooding

1. The Contention:

The State alleges in Contention N that:

> Contrary to the requirements of 10 C.F.R. § 72.92, the Applicant has completely failed to collect and evaluate records relating to flooding in the area of the intermodal transfer site, which is located less than three miles from the Great Salt Lake shoreline.

State Petition at 98. The asserted bases for the contention are set forth in two pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its bases:

> Contrary to the requirements of 10 C.F.R. § 72.92, the Applicant has completely failed to collect and evaluate

> records relating to flooding in the area of the intermodal transfer site, which is located less than three miles from the Great Salt Lake shoreline. Such an investigation of flooding is necessary because:
>
> a) The elevation of the rail tracks in the Rowley Junction area, which has been impacted by extensive flooding, is just 3 to 8 feet higher than Great Salt Lake's historic high flood.
>
> b) The elevation of intermodal transfer site is only seven feet higher than the Lake's historic high.
>
> c) 10 C.F.R. § 72.92 requires the Applicant to identify, document and evaluate the significance of potential flooding events to the design of the intermodal transfer site and rail route paralleling the Great Salt Lake.
>
> d) Further, 10 C.F.R. Part 100, Appendix A, IV(c)(2), and 10 C.F.R. § 72.92 and § 72.102(b) require the Applicant to investigate information regarding floods and water waves along the lake shore that may have been generated by earthquake or landslide events.

2. Applicant's Response to the Contention

The State contends in Utah Contention N that Applicant must "identify, document, and evaluate the significance of potential flooding events to the design of the intermodal transfer site and rail route paralleling the Great Salt Lake" in accordance with the requirements of 10 C.F.R. § 72.92. (State Petition at 98.) That regulation provides, in relevant part, as follows:

> Natural phenomena that may exist or that can occur in the region of a proposed site must be identified and assessed according to their potential effects on the safe operation of the ISFSI or MRS. The important natural phenomena that affect the ISFSI or MRS design must be identified.

10 C.F.R. § 72.92(a) (emphasis added).

Thus, 10 C.F.R. 72.92 discusses the design basis requirements of the ISFSI with respect to external natural events, and is not applicable to the intermodal transfer point.[34] As discussed in response to Utah Contention B, the intermodal transfer point is not a storage facility subject to licensing under 10 C.F.R. Part 72. Rather, the spent fuel remains in transit to the PFSF and is contained in a shipping cask regulated by 10 C.F.R. 71. The provisions of 10 C.F.R. Part 71, and not Part 72, provide for the regulation of shipments of spent fuel in order to protect the public health and safety.[35]

Contentions are not cognizable unless they are material to a matter that falls within the scope of the proceeding for which the licensing board has been delegated jurisdiction as set forth in the Commission's Notice of Opportunity for Hearing. See Section II.B. supra at 8-9. The Notice of Opportunity for Hearing in this case delineates the scope of the present licensing proceeding to include only the consideration of "an application . . . for a materials license, under the provisions of 10 C.F.R. part 72, . . . to possess spent fuel and other radioactive materials associated with spent fuel storage in an [ISFSI] located on the Skull Valley Goshute Indian Reservation . . . ." 62 Fed. Reg. 41,099 (1997) (Notice of Opportunity for Hearing). While ISFSIs are licensed under Part

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[34] Similarly, the regulatory provisions cited by the State as its basis for contending that Applicant must consider floods and water waves along the lake shore generated by earthquake and landslide events are provisions that pertain to the design of the ISFSI and likewise are not applicable to intermodal transfer point.

[35] The provisions in 10 C.F.R. Part 71 address the submersion of shipping casks in water raised by Utah Contention N. In accordance with 10 C.F.R. §71.73(c)(6), "Hypothetical accident conditions (Immersion)," the shipping casks must be able to be submerged to a depth of 50 feet and maintain leak tightness. As stated in Contention N, the highest recorded flood level in the Rowley Junction area of 4211.85 ft is seven feet lower than the elevation at the intermodal point, which is not enough to produce any flood at the intermodal point, let alone a flood 50 feet deep that would challenge the leak tightness of the shipping casks in which the spent fuel would be shipped to the PFSF.

72, the transportation of spent fuel is governed by Part 71 and other provisions, but not Part 72. 10 C.F.R. § 71.0 ("Purpose and scope"). Thus, this contention should be dismissed because it seeks to raise an issue beyond the scope of this proceeding.

O. Utah Contention O: Hydrology

1. The Contention

The State alleges in Contention O that:

> The Applicant has failed to adequately assess the health[,] safety and environmental effects from the construction, operation and decommissioning of the ISFSI and the potential impacts of transportation of spent fuel on groundwater, as required by 10 CFR §§ 72.24(d), 72.100(b) and 72.108.

State Petition at 100. The asserted bases for the contention are set forth in eight pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated incorporating the specific allegations in its bases as indicated below:

> The Applicant has failed to adequately assess the health, safety and environmental effects from the construction, operation and decommissioning of the ISFSI and the potential impacts of transportation of spent fuel on groundwater, as required by 10 CFR §§ 72.24(d), 72.100(b) and 72.108, in that
>
> a) Pathways and Contaminants. PFS has failed to identify all effluent sources and potential contaminants and contaminant pathways that have subsequent impacts to surface water and ground water in the following respects:
>
> (i) Sewer/wastewater. PFS does not describe the facility wastewater system.

(ii) Retention pond. Storage pads will likely transport various radiological, heavy metal and chemical contaminants to the unlined pond which will act as direct pathway to ground water.

(iii) Operations. PFS's proposed operation will generate a number of radiological, chemical or heavy metal contaminants that may be transferred to the ground water.

(iv) Construction. Construction of ISFSI, access road, etc. will generate potential contaminants released to the ground water.

a) Ground Water and Surface Water. PFS has failed to accurately characterize the groundwater and surface water around the site and has failed to accurately characterize the groundwater along the transportation corridor.

(i) Groundwater at the Site

(ii) Groundwater Along the Transportation Corridor

(iii) Surface Water

a) Water Usage. PFS has failed to adequately discuss or evaluate the effect of its water usage on other well users and on the aquifer. PFS has also failed to discuss water needs, the impact of water usage and water rights at the intermodal transfer site.

b) Downgradient Impacts. PFS has failed to discuss impact of ground water contamination on down gradient hydrological resources: 30 irrigation/stockwells, approximately 50 springs, the Timpie Springs water fowl management area and the Great Salt Lake.

2. Applicant's Response to the Contention

The State raises a number of issues under Contention O, which we address in turn below.

a) Pathways and Contaminants

The State asserts that the ISFSI presents the potential for a number of contaminant sources. State Petition at 100. According to the State, PFS has failed to identify all effluent sources and potential contaminants and contaminant pathways associated with the construction and operation of the ISFSI that "may subsequently have impacts [on] surface water and groundwater in the following respects." Id. at 101. The Applicant addresses each one in turn.[36]

(i) Sewer/Wastewater

The State claims that PFS does not describe the facility wastewater system. State Petition at 101. It also alleges that the sanitation system will provide "a direct pathway to groundwater for chemical, heavy metal, and radiological contaminants that are collected or accidentally drained into the sewage system," along with "contaminants from employee handwashing, laundry, restrooms, showers, cafeteria, and laboratory waste streams." Id. The State also asserts that the drain sumps used to catch and collect water

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[36] The State cites Standard Review Plan for Spent Fuel Dry Storage Facilities, NUREG-1536, as authority for its arguments regarding the extent to which the Applicant must characterize the areas around the ISFSI in its environmental assessment. See, e.g., State Petition at 101, 106. The Commission has stated that:

> NUREGs . . . are advisory by nature and do not themselves impose legal requirements on either the Commission or its licensees. A licensee is free to either rely on NUREGs . . . or to take alternative approaches to meet legal requirements (so long as those approaches have the approval of the Commission or the NRC Staff).

Curators of the University of Missouri (TRUMP-S Project), CLI-95-8, 41 NRC 386, 397 (1995). The guidance provided by the Standard Review Plan regarding environmental reports is not applicable to groundwater characterization in this case because the ISFSI will have no significant impact on area groundwater.

that drips off the spent fuel shipping casks in the canister transfer building "will be discharged into the sanitary system." Id.

This subcontention must be dismissed because it fails to include "a concise statement of the alleged facts or expert opinion which support [it] . . . together with references to those specific sources and documents . . . on which the petitioner intends to rely to establish those facts or expert opinion." 10 C.F.R § 2.714(b)(2)(ii). First, the State provides no facts, expert opinion, or documents to support its allegation that "chemical, heavy metal, and radiological contaminants" will be "collected or accidentally drained into the sewage system." See State Petition at 101. It also provides no basis or transport path on how these "chemical, heavy metal, and radiological contaminants" could originate from hand washing, laundry, restrooms, showers, the cafeteria and laboratory waste streams and be released through the septic system. Id. Furthermore, the State's claim that the drain sumps will be discharged into the sanitary system after catching water that drips off the transfer casks in the canister transfer building (id.) is wrong. See SAR at 7.5-4. The water in the sumps is monitored for contamination and if found to be contaminated is treated as low-level waste and disposed of accordingly under 10 C.F.R. Part 20. Id. There are no connections from the sumps to the septic system. Id. at 4.7.1. The State provides no basis for believing that such a connection exists. A bald or conclusory allegation of dispute is not sufficient to admit a contention; the petitioner must show that "facts are in dispute," thereby demonstrating that an "inquiry in depth" is appropriate. Texas Utilities Electric Company (Comanche Peak Steam Electric Station, Unit 2), LBP-92-37, 36 NRC 370, 376 (1992). Because this subcontention contains no

more than conclusory allegations, and does not show that the ISFSI's sewer or wastewater will introduce any contaminants into the groundwater, it must be dismissed. Also, because it ignored relevant material in the Application, it should be dismissed.

(ii) Retention Pond

The State claims that "the storage pads will likely transport various radiological, heavy metal and chemical contaminants to the unlined pond which will act as direct pathway to ground water." State Petition at 101. The State also claims that "during heavy rains or floods the retention pond may overflow and contaminate perennial and intermittent surface streams." Id.

This subcontention must be dismissed because it fails to include supporting facts or expert opinion, together with references to specific sources and documents to establish such facts or expert opinion. The State provides no facts, expert opinion, or documents to support its allegation that "radiological, heavy metal, and chemical contaminants" will be transported from the storage pad into the retention pond and hence into the groundwater and perennial and intermittent streams. Furthermore, the state fails to provide facts, expert opinion, or documents to show how "radiological, heavy metal, and chemical contaminates" may be transferred to the storage pads, let alone to the retention pond. See State Petition at 102. Moreover, the Applicant's survey indicates that no springs occur within five miles of the PFSF and no perennial streams exist in the vicinity of the site. SAR at 2.5-2. This is also a bald and conclusory allegation of dispute which ignores information in the Application and, thus, it must be dismissed.

The State asserts that the retention pond may overflow and contaminate nearby streams during heavy rains or floods. State Petition at 102. The Environmental Report, however, states that the retention pond was designed to withstand a 100-year flood. ER at 4.2-4 to 5. The State has provided no basis for its unsupported allegation that the retention pond "may overflow" or the probability of that occurring. Since this is a NEPA contention and since NEPA does not require consideration of remote and speculative impacts (Vermont Yankee Nuclear Power Corporation (Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29 at 44 (1989), vacated in part on other grounds and remanded, CLI-90-4, 31 NRC 333 (1990)), this subcontention must be dismissed.

(iii) Operations

The State alleges that PFS's proposed operation "will generate a number of radiological, chemical or heavy metal contaminants that may be transferred to the ground water." State Petition at 102. It alleges that routine maintenance of equipment will generate "solvents and other organic contaminants." Id. It claims that the washing of trucks or precipitation will generate effluents that "may be contaminated with radioactive, heavy metal, or organic contaminants" at the site and at the intermodal transfer facility. Id. Finally, it claims that "[l]aboratory operations may generate a variety of radiological, heavy metal, or chemical contaminants." Id.

This subcontention must be dismissed because it fails to include supporting facts or expert opinion, together with references to specific sources and documents to establish such facts or expert opinion. The State provides no facts, expert opinion, or documents to

support its allegations that "radiological, heavy metal, or chemical contaminants" or "solvents and other organic contaminants" will be generated or released during the operation of the ISFSI, let alone seep into the groundwater. See State Petition at 102. This is also a bald and conclusory allegation of dispute and thus it must be dismissed.

Finally, the portion of this subcontention dealing with the intermodal transfer part must be dismissed because the transportation of spent fuel is subject to the shipping requirements of 10 CFR 71.43(f) in which the integrity of the cask precludes any leakage of radiological, heavy metal, or chemical contaminates and is, therefore, outside the scope of this hearing. As discussed in Section II.B above, contentions are not cognizable unless they are material to a matter that falls within the scope of the proceeding for which the licensing board has been delegated jurisdiction as set forth in the Commission's Notice of Opportunity for Hearing. The Notice of Opportunity for Hearing in this case refers to 10 CFR part 72.

(iv) Construction

The State alleges that construction of ISFSI and the improvement of the transportation corridor will generate "a number of radiological, chemical, or heavy metal" contaminants which will potentially be released to the groundwater. State Petition at 103.

Like Subcontention (a)(3), this subcontention must be dismissed because it fails to include supporting facts or expert opinion, together with references to specific sources and documents to establish such facts or expert opinion. Again, the State provides no facts, expert opinion, or documents whatsoever to support its allegations that

"radiological, heavy metal, or chemical contaminants" will be generated or released during the construction of the ISFSI from materials or equipment. Indeed, the State does not ever identify the types or sources of these alleged contaminants. See State Petition at 103. This is another bald and conclusory allegation of dispute and thus must be dismissed.

b) Ground Water and Surface Water

The State claims that the Applicant has not properly characterized the groundwater and surface water around the site and that the Applicant has not properly characterized the groundwater along the transportation corridor. State Petition at 103. The State asserts that the Applicant has not supported its characterizations with proper calculations. Id. The Applicant addresses each of these points below.

(i) Groundwater at The Site

The State claims that PFS does not adequately support its claim that ground water will not be affected because of the depth of groundwater at the site (100 to 127 feet), the low general permeability, and the ground water velocity. State Petition at 103. The State claims that the Applicant does not support its statements with calculations based on specific factors or the identification of potential contaminants or pathways to groundwater. Id.

This subcontention contains no facts, expert opinion, or documents to support its argument that the depth to groundwater, permeability, or groundwater velocity information presented in the Application is incorrect. See State Petition at 103. The

allegation that "Applicant does not support its statements with any calculations based on specific factors" is no more than a bald and conclusory allegation of dispute and must be dismissed. As for Applicant's alleged failure to identify potential contaminants, the State ignores, and does not challenge, the information in the Application showing no radioactive effluents. See, e.g., ER at 6.2-1, 6.4-2, 6.5-2. The subcontention is therefore also deficient for ignoring relevant material submitted by the Applicant. Indeed, the contention subsequently implies that this information is correct. State Petition at 104 ("while the Applicant describes the subterranean state, the low permeability, and the low groundwater velocity at the site, ER § 2.55, the Applicant does not describe these factors along the transportation route or at the intermodal transfer point.")

(ii) Groundwater Along The Transportation Corridor

The State asserts that PFS erroneously assumes that the ground water depth along the proposed rail spur is over 100 feet. State Petition at 104. Furthermore, the State claims that PFS has not addressed the groundwater depth at Rowley Junction (the proposed location of the intermodal transfer facility). Id. Moreover, the State claims that PFS does not describe the subterranean strata, the permeability, and the groundwater velocity along the transportation corridor. Id.

This subcontention must be dismissed because it does not include sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. 10 C.F.R. § 2.714(b)(2)(iii). The State has not shown how the groundwater depth and the characteristics of the subterranean soil relevant to groundwater movement

along the transportation corridor are material to the impact of the ISFSI on the environment, in that it has not shown that any contaminants will be discharged into the soil there. See State Petition at 101-03; supra, Subcontention (a). If there are no contaminants, the groundwater depth or the character of the subterranean soil is immaterial to environmental impact and it need not be discussed. See 10 C.F.R. § 51.45(b)(1) ("[i]mpacts shall be discussed in proportion to their significance"). Because the State has not shown that the groundwater accessibility is a material issue of fact, this subcontention must be dismissed. See Section II.B. supra at 9.

This subcontention must also be dismissed because it ignores relevant material submitted by the Applicant. The Applicant has addressed the potential for groundwater contamination along the transportation corridor from both a road or a rail line and has found that it is unlikely that either option would have an effect on the groundwater. ER at 4.3-6, 4.4-3 to 4.

Finally, this subcontention should be dismissed because the integrity of the casks, which are used in the packaging and transportation of spent nuclear fuel, is addressed and assured under 10 CFR 71 and is, therefore, beyond the scope of this hearing. See, supra, Subcontention (a)(3).

(iii) Surface Water

The State claims that the Environmental Report fails to adequately identify surface waters that may be affected by the ISFSI and that PFS does not justify its

conclusion that the concentration of flood water around the facility will not impact surface or ground water. State Petition at 105.

This subcontention must be dismissed because the document that the State uses to support its argument that the Applicant's assessment of surface water around the site does not support the point for which it is urged. Vermont Yankee, ALAB-919, 30 NRC at 48. The State takes issue with the Applicant's statement that there are few perennial streams or springs in Skull Valley and none in the vicinity of the site and cites Exhibit 14 as support for its argument. State Petition at 104-5 (citing ER at 2.5-2, 4.1-10, 4.3-6). The State asserts that there are "at least fifty springs located within 15 miles of the proposed ISFSI" and that there are "perennial waters protected for agricultural uses within 10 miles of the site." Id. at 105. The State's Exhibit 14, however, shows that the closest spring is 4.9 miles from the site and no other is closer than 5.2 miles away. State Exhibit 14. The State does not say why its document contradicts Applicant's statements. It does not. Furthermore, Exhibit 14 says nothing about "perennial waters protected for agricultural uses." Id. Thus, Exhibit 14 does not support the point for which it is urged; the Applicant's statement that there are no springs or perennial waters near the site is indeed correct and this subcontention must be dismissed.

This subcontention must also be dismissed because it does not include sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. See Section II.C.2. supra. The State has not shown how the location of perennial waters or springs five or more miles from the site is material to the impact of the ISFSI on the environment, in that it has not shown that any contaminants would reach

them or would even be discharged from the ISFSI. See State Petition at 101-05; supra Subcontention (a). If there are no contaminants or they cannot reach the perennial waters or springs, the location of the waters or springs is immaterial to environmental impact and it need not be discussed. See 10 C.F.R. § 51.45(b)(1) ("[i]mpacts shall be discussed in proportion to their significance"). Because the State has not shown that the location of distant perennial waters and springs is a material issue of fact, this subcontention must be dismissed.

Applicant does not oppose the aspect of the State's subcontention that relates to the Probable Maximum Flood and State Contention M. See State Petition at 105.

c) Water Usage

The State asserts that PFS has failed to adequately discuss or evaluate the effect of its water usage on other well users and on the aquifer. State Petition at 105. According to the State, PFS has also failed to adequately discuss its water needs and the impact of water usage on local groundwater users. Id. at 106 (citing Standard Review Plan for Spent Fuel Dry Storage Facilities, NUREG-1567 at 2-10, 2-13).[37] Finally, the State asserts that the Applicant has not discussed water needs, the impact of water usage, and water rights at the intermodal transfer site. State Petition at 106.

This subcontention must be dismissed because it does not include sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. See Section II.C.2. supra. If the State believes that the Applicant's

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[37] As to reliance upon NUREG-1567, see footnote 36 at p. 171

characterization of the ISFSI's impact on hydrological resources is inadequate, it must provide facts or expert opinion to show why. Florida Power and Light Company (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-90-16, 31 NRC 509, 521 (1990). The State has provided no support for its assertion that PFS's usage will have any significant impact on local groundwater levels or on local groundwater users. See State Petition at 105-06. If PFS's water usage would have no significant impact on local hydrological resources or on the users thereof, PFS's water usage or the characteristics of local water resources need not be discussed. See 10 C.F.R. § 51.45(b)(1) ("[i]mpacts shall be discussed in proportion to their significance"). Because the State has not shown that the impact of PFS's water usage on hydrological resources is a material issue of fact, this subcontention must be dismissed.

Moreover, this subcontention must be dismissed because it ignores relevant material submitted by the Applicant. The State claims that the Applicant does not indicate whether its water needs of 1,500 gallons per day are daily or peak needs nor whether they are for construction or operation. State Petition at 105. Furthermore, the State claims that the Applicant admits that the extent of the drawdown of the local aquifer "cannot be estimated until the wells [to supply the site] are drilled." Id. at 106 (quoting SAR at 2.5-5). First, the Application clearly states that it estimates its water needs to be 5,000 gallons per day during construction and 1,500 gallons per day during operation. SAR at 2.5-5. Second, the Application further states that drawdown of the local aquifer, while not precisely predictable at this time, "would not extend beyond the site boundary."

Id. at 2.5-5 to 6. Because the State has ignored this material, this subcontention must be dismissed.

d) Downgradient Impacts

The State claims that PFS has failed to discuss the impact of groundwater contamination on downgradient hydrological resources. State Petition at 107. The State asserts that there are 30 irrigation/stockwells, approximately 50 springs, the Timpie Springs water fowl management area, and the Great Salt Lake that are vulnerable to contamination from the ISFSI. Id. at 107-08. The State asserts further that potential accidents involving shipping casks transported along the Great Salt Lake and the transportation corridor to the ISFSI "would have serious effects." Id. at 108.

This subcontention must be dismissed because the State provides no basis in fact, expert opinion, or documents to support its assertion that the ISFSI will have any impact on downgradient hydrological resources. The State provides no factual basis for its assertion that the ISFSI will release any contaminants into the soil or if it did that they would reach the groundwater. See State Petition at 107-108; Subcontention (a), supra.

The subcontention must also be dismissed because it ignores relevant material submitted by the Applicant. The State implies that surface contaminants discharged by the ISFSI (assuming arguendo that there would be any contaminants) would reach the groundwater and then migrate into downgradient hydrological resources, and thus the Applicant must discuss the impact on those resources. State Petition at 107. The

Applicant's Environmental Report, however, states that although groundwater beneath the Skull Valley does generally migrate to the north,

> Precipitation on, or surface runoff to the valley bottom remains ponded until it evaporates. The precipitation that is absorbed does not reach the water table in the southern end and central parts of the valley because of the depth of the water table [and] the low permeability of the soil materials . . . .

ER at 2.5-9 to 10. Moreover, the Environmental Report acknowledges the existence of wells in the valley and concludes nevertheless that the ISFSI will have "no measurable offsite effects on existing groundwater quality or levels." Id. at 2.5-10 to 12. Therefore, because the State has ignored this material, this subcontention must be dismissed.

Moreover, this subcontention must be dismissed because the State asserts that "potential accidents" involving the transportation of spent fuel casks would have "serious effects" on downgradient hydrological resources, without providing any scenario or basis for such an accident. State Petition at 108. When a postulated accident scenario provides the premise for a contention, the accident cause must be described and some credible basis for it must be provided. The State provides no causative mechanism and no factual basis whatsoever for any transportation accident. See State Petition at 108. Therefore, this subcontention must be dismissed.

Finally, this subcontention must be dismissed because the transportation of spent nuclear fuel is beyond the scope of this hearing. See, supra, Subcontention (a)(iii).

P. Utah Contention P: Inadequate Control of Occupational and Public Exposure to Radiation

1. The Contention

The State alleges in Contention P that:

> The applicant has not provided enough information to meet NRC requirements of controlling and limiting the occupational radiation exposures to as low as is reasonably achievable and analyzing the potential dose equivalent to an individual outside of the controlled area from accidents or natural phenomena events.

State Petition at 109. The asserted bases for the contention are set forth in five pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows, incorporating the specific allegations in its bases.

> The Applicant has not provided enough information to meet NRC requirements of controlling and limiting the occupational radiation exposures to as low as is reasonably achievable and analyzing the potential dose equivalent to an individual outside the controlled area from accidents or natural phenomena events in that:
>
> a) The License Application does not describe the design features that provide ALARA conditions during transportation, storage and transfer of waste. Specifically, if PFS has incorporated ALARA concepts, the storage casks used at the PFSF should have the lowest dose rates.
>
> b) The License Application fails to provide an analysis of alternative cask handling procedures to demonstrate that the procedures will result in the lowest radiation doses.
>
> c) The License Application does not adequately describe why the Owner Controlled Area boundary was chosen

and whether the dose rates at the boundary will be the ultimate minimum value compared to other alternatives.

d) The License Application does not indicate whether rain water or melted snow from the ISFSI storage pads will be collected, analyzed, and handled as radioactive waste.

e) The License Application does not provide design information on ventilation system for the "unloading" facility to show workers will be protected. In addition, procedures to maintain filter efficiency and the replace components are not provided.

f) The License Application does not provide information on how estimated radiation exposure values to operating personnel were derived to determine whether the dose rates are adequate.

g) The License Application does not provide an adequate description of the following to ensure occupational ALARA:

- the management policy and organizational structure to ensure ALARA;
- a training program;
- personnel and area, portable and stationary radiation monitoring instruments and personnel protective equipment, and a program for routine calibration and equipment checks;
- a program to control access to radiation areas;
- a program to maintain ALARA exposures of personnel servicing "leaking" casks;
- a program for monitoring clean area and dose rates in radiation zones;
- information on formal audits and reviews of the radiation program.

h) The License Application has completely failed to include an analysis of accident conditions including accidents due to natural phenomena.

i) The License Application fails to describe adequate control of airborne effluents, see Utah Contention T, Basis 3(a), which may cause unacceptable exposures to workers and the public.

2. Applicant's Response to the Contention

The State raises a number of issues under its Contention P. Applicant addresses in turn below each of the specific allegations raised by the State in Contention P as set forth above.

a) Failure to Describe ALARA Design Features and Failure to Select Storage Casks with the Lowest Dose Rates

The State alleges that the License Application does not describe the design features that provide ALARA conditions during transportation, storage and transfer of waste. See State Petition at 111. Specifically, the State asserts, if PFS has incorporated ALARA concepts into the license application, the storage casks used at the PFSF "should have the lowest dose rates." See id. at 110-11 (emphasis added).

The first part of the State's contention, that "PFS has not described the design features that provide ALARA conditions" is mistaken and ignores pertinent portions of the Applicant's license application. See id. at 109 (emphasis added). The PFSF design features that provide ALARA conditions for the PFSF are explicitly described in Section 7.1.2, "Design Considerations," within Section 7.1, "Ensuring that Occupational Radiation Exposures are As Low As Is Reasonably Achievable (ALARA)" in the Safety Analysis Report. See SAR at 7.1-4 to 9. The PFSF radiation protection design features

are further described in 17 pages of text and 8 tables in Section 7.3, "Radiation Protection Design Features," in the Safety Analysis Report. See SAR at 7.3-1 to 17 and Tables 7.3-1 to 7.3-8. The State's contention fails to address, or challenge the validity of, any of the discussion of ALARA design features in the License Application. The State's contention must be dismissed for failing to address the pertinent portions of the license application and failing to provide a sufficient basis for a litigable contention. See Section II.C.2. supra at 15-16.

The second part of subcontention (a) alleges that if PFS has incorporated ALARA concepts into the license application, the storage casks used at the PFSF "should have the lowest dose rates." See State Petition at 110-11 (emphasis added). The State provides no regulatory basis for this proposition.

There is no Commission regulation that requires the Applicant to select only the storage cask system with "the lowest dose rates," as the State contends. The Commission's regulations require the Applicant to select a spent fuel storage systems that "is designed with . . . suitable shielding for radioactive protection under normal and accident conditions." 10 C.F.R. § 72.128(a) (emphasis added). The Commission requires that the storage system have "suitable shielding," not the "lowest dose rates" of any available storage system design. The State does not address or refute the Commission's regulations on the selection of spent fuel storage systems.

The State's allegation that the Commission's ALARA regulations require selecting the spent fuel storage system with "the lowest dose rates" (State Petition at 110

(emphasis added)) misinterprets the Commission's ALARA regulations. The State's contention distorts the meaning of the Commission's regulations on ALARA and must be rejected as an impermissible collateral attack on the Commission's regulations. See 10 C.F.R. § 2.758. Under the Commission's regulations, ALARA:

> means as low as is reasonably achievable taking into account the state of technology, and the economics of improvement in relation to-
>
> (1) Benefits to the public health and safety,
>
> (2) Other societal and socioeconomic considerations, and
>
> (3) The utilization of atomic energy in the public interest.

See 10 C.F.R. § 72.3 (definition of ALARA). The ALARA "concept requires licensees to maintain exposures to radiation as far below regulatory limits as is practical." Babcock and Wilcox Company (Pennsylvania Nuclear Services Operations, Parks Township, Pennsylvania), LBP-95-1, 41 NRC 1, 12 (1995) (emphasis added).

The Commission has established that "a licensee's actions do not violate the ALARA principle simply because some way can be identified to reduce radiation exposures further." Yankee Atomic Electric Company (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1, 8 (1996) (emphasis added). ALARA does not require the selection of only a spent fuel storage system with "the lowest dose rates," as the State contends. This contention must be must be rejected as an impermissible collateral attack on the Commission's regulations. 10 C.F.R. § 2.758.

b) Selection of Cask Handling Procedures with the Lowest Radiation Doses

The State alleges that the License Application fails to provide an analysis of alternative cask handling procedures to demonstrate that the procedures "will result in the lowest individual radiation and collective doses." See State Petition at 110 (emphasis added). The State provides no support for this contention. Contrary to the State's contention, the Commission's regulations do not require an ISFSI applicant to submit "procedures for workers handling the casks" at the ISFSI or "an analysis of alternative procedures" for "handling the casks" as part of the License Application for an ISFSI. See generally, 10 C.F.R. Part 72; see also 10 C.F.R. § 72.24 ("Contents of application: Technical information"). The State does not provide any regulatory basis showing that cask handling procedures are required as part of the License Application.

Furthermore, the State's allegation that cask handling at the PFSF must "result in the lowest individual radiation and collective doses" (State Petition at 110 (emphasis added)) misinterprets the Commission's ALARA regulations. The State's contention distorts the meaning of the Commission's regulations on ALARA and must be rejected as an impermissible collateral attack on the Commission's regulations. See 10 C.F.R. § 2.758. As noted above, the ALARA "concept requires licensees to maintain exposures to radiation as far below regulatory limits as is practical." Babcock and Wilcox, supra, 41 NRC at 12 (emphasis added). The Commission has established that "a licensee's actions do not violate the ALARA principle simply because some way can be identified to reduce radiation exposures further." Yankee Atomic, supra, 43 NRC at 8 (emphasis added). ALARA does not require, per se, the selection of cask handling procedures with the "lowest individual radiation and collective doses," as the State contends. This contention

must be rejected as an impermissible collateral attack on the Commission's regulations. 10 C.F.R. § 2.758.

c) Choice of OCA Boundary and Determination that Boundary Will Result in Ultimate Minimum Dose Rates

The State alleges that the License Application does not adequately describe why the Owner Controlled Area ("OCA") boundary was chosen and whether the dose rates at the boundary will be the "ultimate minimum values" compared to other alternatives. See State Petition at 110 (emphasis added). The State references "Reg. Guide-3.62." for this contention. See id. Regulatory Guide 3.62 has no relevance to this proceeding. See Regulatory Guide 3.62, Standard Format and Content for the Safety Analysis Report for Onsite Storage of Spent Fuel Storage Casks (1989). Regulatory Guide 3.62 explicitly states that it is "guidance for preparing the SAR if the ISFSI is collocated with a civilian nuclear power reactor." Id. at v (emphasis added). The PFSF is an independently-located ISFSI that is not collocated with a civilian nuclear power reactor. There is no basis, nor has the State alleged any, for applying this Regulatory Guide to the license application for the PFSF. The State provides no other support for this contention.

The Commission has explicitly established a regulation for selection of the OCA boundary which states:

> The minimum distance from spent fuel or high-level radioactive waste handling and storage facilities to the nearest boundary of the controlled area shall be at least 100 meters.

10 C.F.R. § 72.106(b). The selection of the OCA boundary for the PFSF far exceeds the Commission's requirement of 100 meters. See SAR at 7.6-1. The basis for selection of the OCA boundary is discussed in the License Application. Section 7.1.2, "Design Considerations," of the Safety Analysis Report states:

> ALARA considerations have been incorporated into the PFSF design, in accordance with 10 C.F.R. 72.126(a), based upon the layout of the PFSF area and the type of spent fuel storage system selected. The following summarizes the design considerations:
>
> • The peripheral storage pads are located 150 ft (45.7 meters) from the Restricted Area (RA) fence and 2,119 ft (646 meters) from the owner controlled area (OCA) boundary at their closest locations. This provides an acceptable distance from radiation sources to offsite personnel to ensure dose rates at the OCA boundary are minimized and maintained within specified limits.

SAR at 7.1-4. Selection of the OCA boundary is also discussed in Section 7.3, "Radiation Protection Design Features," of the Safety Analysis Report which states:

> The PFSF site layout provides substantial distance between the cask storage area and the OCA boundary, minimizing radiation exposures to individuals outside the OCA and assuring offsite dose rates are well below the 10 C.F.R. 72.104 criteria. The closest distance from a storage pad to the OCA boundary is 2,119 ft (646 meters).

SAR at 7.3-2.

The State has not addressed, or challenged the validity of, these sections of the License Application addressing the selection of the OCA boundary. The State's contention must be dismissed for failing to address the pertinent portions of the License Application and failing to provide a sufficient basis for a litigable contention.

The State further asserts that the License Application must demonstrate that the selection of the OCA boundary will result in dose rates that are the "ultimate minimum values" compared to other alternatives. See State Petition at 110 (emphasis added). The State's definition of ALARA as requiring the "ultimate minimum values" is mistaken under the Commission's regulations. The State's contention distorts the meaning of the Commission's regulations on ALARA and must be rejected as an impermissible collateral attack on the Commission's regulations. See 10 C.F.R. § 2.758; see also response to subcontention (a) supra.

d) Failure to Indicate Whether Rain Water and Melted Snow from the Storage Pads Will Be Handled as Radioactive Waste

The State alleges that the License Application "has failed to indicate whether rain water or melted snow from the ISFSI storage pads" will be collected, analyzed, and handled as radioactive waste. See State Petition at 110. The State references Regulatory Guide 3.62 as support for this contention. Id. As discussed supra, Regulatory Guide 3.62 applies only "if the ISFSI is collocated with a civilian nuclear power reactor," and is not applicable to this proceeding. Furthermore, the section of Regulatory Guide 3.62 that is cited by the State, Section 7.1.3, "Operational Considerations," does not say anything about collecting "rain water or melted snow from the ISFSI storage pads," as the State's citation to it would suggest. Instead, Regulatory Guide 8.8, Section 7.1.3, in total, provides only the generalized guidance to:

> Describe the methods and procedures used to ensure that occupational radiation exposure will be ALARA.

Regulatory Guide 3.62 at 3.62-21. The State provides no explanation, support, or basis of any kind for the assertion that Regulatory Guide 3.62, Section 7.1.3, includes a requirement to "collect [] and analyze[]" "rain water or melted snow from the ISFSI storage pads...." See State Petition at 110.

There is no basis, nor has the State alleged any, for applying this Regulatory Guide to the license application for the PFSF. The State provides no other support for this contention.

The State's assertion that the License Application has "failed to indicate" whether surface water runoff from the ISFSI storage pads will be treated as a liquid radioactive effluent is mistaken, and overlooks pertinent portions of the License Application. Section 6.2 of the Environmental Report states unambiguously that "the PFSF has no site effluent monitoring system" either for rain or melted snow or other sources. The " PFSF has no site effluent monitoring system" because, inter alia, "there are no effluent releases from the storage system utilized at the PFSF." See ER at 6.2. The State's assertion that the license application "failed to indicate" whether rain water or melted snow from the storage pads would be collected, analyzed, and handled as a radioactive effluent is wrong. See 54 Fed. Reg. at 33,170. Again, the State's contention must be dismissed for failing to address the pertinent portions of the license application and failing to provide a sufficient basis for a litigable contention.

Furthermore, there is no requirement for the "rain water or melted snow from the ISFSI storage pads" to be "collected," "analyzed," and "handled as radioactive

contaminated waste," as the State contends. See State Petition at 110. There is no way for the "rain water or melted snow from the ISFSI storage pads" addressed in State's contention to become radioactively contaminated (nor has the State alleged any such mechanism), and a radioactive effluent monitoring system for this surface runoff is not appropriate, and therefore not required under the Commission's regulations. The Commission's regulations require:

> (c) Effluent and direct radiation monitoring. (1) As appropriate for the handling and storage system, effluent systems must be provided. Means for measuring the amount of radionuclides in effluents during normal operations and under accident conditions must be provided for these systems. A means of measuring the flow of the diluting medium, either air or water, must also be provided.

10 C.F.R. § 72.126(c) (emphasis added). The regulation makes clear on its face that effluent radiation monitoring systems need only be provided "as appropriate for the handling and storage system," not absolutely in every case.

No radioactive liquid wastes are generated at the PFSF. See SAR at 7.6-3. The storage system designs for the PFSF use only seal welded metal canisters to preclude any radioactive effluents from the canister internals. See id. at 7.1-5, 7.5-4. The License Application states that

> Under normal and off-normal conditions of transport, handling, storage, and removal offsite, the potential does not exist for breach of the canister and release of radioactive material associated with the spent fuel from inside the canister. . . . [t]here are no credible scenarios that release effluents.

ER at 6.2-1. The storage casks themselves are monitored for surface contamination in the Canister Transfer Building, and decontaminated in the unlikely event that they pick up removable contamination as a result of an off-normal condition, such as a canister mishandling event. See SAR at 6.4-2. Thus, "[d]uring spent fuel storage, no releases of any type of radioactive material occur. Therefore, there are no radiological waste impacts from the storage of spent fuel." Id. at 6.5-2. Because there are no releases of any type of radioactive material from spent fuel storage, surface water runoff from the PFSF storage area cannot contain any radioactive effluents. Because of the PFSF storage system design, it is not "appropriate" to have an effluent monitoring system for the "rain water or melted snow from the ISFSI storage pads". The State has provided no basis (other than its inappropriate citation to Reg. Guide 3.62) why lack of such monitoring is "inappropriate". One is therefore not required by the Commission's regulations and accordingly, the State's contention must be dismissed as an impermissible challenge to those regulations.

e) Failure to Provide Information on Ventilation System for the Unloading Facility

The State alleges that the License Application does not provide design information on ventilation system for the "unloading" facility to show workers will be protected. See State Petition at 110. The State contends that the License Application does not provide procedures to maintain filter efficiency, and to replace components, of the ventilation system. See id. at 111. The State references Regulatory Guide 3.62 as support for this contention. Id. As discussed supra, Regulatory Guide 3.62 applies only

"if the ISFSI is collocated with a civilian nuclear power reactor," and is therefore not applicable to this proceeding. There is no basis, nor has the State alleged any, for applying this Regulatory Guide to the license application for the PFSF. The State provides no other support for this contention.

The State's assertion that the License Application "does not provide" information on the ventilation system for the Canister Transfer Building is mistaken, and overlooks pertinent portions of the Applicant's License Application. Section 7.3.4, "Ventilation," of the Safety Analysis Report specifically addresses the ventilation systems for the PFSF:

> 10 C.F.R. 72.122(h)(3) requires that ventilation systems and off-gas systems be provided where necessary to ensure the confinement of airborne radioactive particulate materials during normal or off-normal conditions. However, there are no special ventilation systems installed in the PFSF facilities. There are no credible scenarios that would require installation of ventilation systems to protect against off-gas or particulate filtration.

SAR at 7.3-16 (emphasis added). Section 6.2, "Offgas Treatment and Ventilation," of the Safety Analysis Report also states that:

> There are no special ventilation systems installed in the PFSF facilities. There are no credible scenarios that would require installation of special ventilation systems to protect against offgas or particulate filtration.

SAR at 6.2-1 (emphasis added). Obviously, because there are no special ventilation systems at the PFSF, the license application does not discuss "[p]rocedures to service, test, inspect, decontaminate, measuring filter efficiency and replace components of the ventilation system," as stated in the State's contention. See State Petition at 111.

The State's allegation that the license application does not provide information on the ventilation system for the Canister Transfer Building is incorrect. The State's contention must be dismissed for failing to address the pertinent portions of the license application and failing to provide a sufficient basis for a litigable contention.

f) Failure to Provide Information on Estimated Radiation Exposure Values to Operating Personnel

The State alleges that the License Application does not provide information on how estimated radiation exposure values to operating personnel were derived to determine whether the dose rates are adequate. See State Petition at 111. The State references Regulatory Guide 3.62 as support for this contention. Id. As discussed supra, Regulatory Guide 3.62 applies only "if the ISFSI is collocated with a civilian nuclear power reactor." There is no basis, nor has the State alleged any, for applying this Regulatory Guide to the PFSF. The State provides no other support for this contention.

The State's assertion that "information on how estimated radiation exposure values to operating personnel were derived is not provided" is mistaken, and overlooks pertinent portions of the Applicant's license application. Section 7.4, "Estimated Onsite Collective Dose Assessment," of the Safety Analysis Report explicitly addresses estimated radiation exposure to operating personnel from PFSF operations. See SAR at 7.4-1. The analysis determines that:

> the total dose from receipt of a loaded shipping cask, transfer of the canister into a storage cask, movement of the storage cask to the pad, and performance of initial surveillances is estimated to be about 180 person-mrem for both HI-STORM and TranStor systems. Assuming a storage cask loading rate of 200 casks per year, the total

> annual dose to operations and Radiation Protection personnel involved in these operations is estimated to be approximately 36 person-rem.

Id. These estimated radiation exposure values to operating personnel are calculated from a detailed breakdown of the overall operations on each storage cask type into 34 individual steps, which are detailed in Tables 7.4-1 and 7.4-2 of the Safety Analysis Report. See SAR, Section 7.4, Tables 7.4-1 and 7.4-2. For each of the 34 individual operations, a separate estimate is provided for: number of personnel; task duration; time in dose area; dose rate in area; and resulting dose. See id. The State's contention does not address, or challenge the validity of, any of these detailed calculations that lead to the estimated radiation exposure values to operating personnel in Section 7.4 of the Safety Analysis Report and, accordingly, should be dismissed.

g) Airborne Effluents May Cause Unacceptable Exposures

The State contends that the License Application does not provide an adequate description of the following to ensure occupational ALARA:

- the management policy and organizational structure to ensure ALARA;
- a training program;
- personnel and area, portable and stationary radiation monitoring instruments and personnel protective equipment, and a program for routine calibration and equipment checks;
- program to control access to radiation areas;
- program to maintain ALARA exposures of personnel servicing "leaking" casks;

- program for monitoring clean areas and dose rates in radiation zones;
- information on formal audits and reviews of the radiation program.

See State Petition at 111-12. The State provides no regulatory support for any of these seven subcontentions. The State does reference NRC Regulatory Guides for five of the seven points, but two of the points are simple assertions with no regulatory, regulatory guide, factual reference, or any other support provided.

The subcontentions that do provide a reference to a Regulatory Guide are invalid as contentions because they mistakenly assert that the Applicant has not addressed a relevant issue, and have overlooked pertinent portions of the License Application where the issues are addressed. None of the State's subcontentions address, or challenge the validity of, the pertinent portions of the License Application where these ALARA and radiation protection issues are discussed.

Each of the State's seven subcontentions is addressed in brief below:

(i) Inadequate description of the management policy and organizational structure to ensure ALARA. See State Petition at 111. The State references Regulatory Guide 3.62 for this subcontention. Id. As discussed supra, Regulatory Guide 3.62 only applies to ISFSIs that are collocated with power reactors. The State provides no other support for this subcontention. The State's subcontention overlooks the fact that the management policy and organizational structure to ensure ALARA are discussed in several locations in the Applicant's License Application. See, e.g., SAR at 7.1-1, 7.1-2, 7.1-3 (program policy and objectives); 7.5-1 to 2 (organizational structure). The State has

neither addressed, nor challenged the validity of, any of these provisions addressing management policy and organizational structure in the Applicant's License Application.

(ii) Inadequate description of radiation protection training program. See State Petition at 111-12. The State's subcontention overlooks the fact that the radiation protection training program is discussed in the Applicant's License Application. See SAR at 7.1-1, 7.1-2 (implementation of training program). The State has neither addressed, nor challenged the validity of, these provisions in the Applicant's License Application.

(iii) Inadequate description of radiation monitoring instruments and personnel protective equipment, and a program for routine calibration and equipment checks. See State Petition at 112. The State's subcontention overlooks the fact that radiation monitoring instruments (including personnel and area, portable and stationary instruments) and personnel protective equipment are discussed in several locations in the Applicant's License Application. See SAR at 7.1-1 (radiation monitoring instruments), 7.1-11 (radiation monitoring and protective clothing), 7.5-2 to 4 (radiation monitoring equipment, dosimetry, protective clothing). These sections of the License Application on radiation monitoring equipment also address routine calibration and checks of that equipment. See e.g., Id. at 7.5-3. The State has neither addressed, nor challenged the validity of, any of these pertinent portions of the Applicant's License Application.

(iv) Inadequate description of the program to control access to radiation areas. See State Petition at 112. The State references Regulatory Guide 8.10, section 1.b

for this subcontention. Id. Regulatory Guide 8.10, section 1.b, however, has nothing to do with access control, and instead addresses "formal audit[s] to determine how exposure might be lowered." See Regulatory Guide 8.10, Operating Philosophy for Maintaining Occupational Radiation Exposures As Low As Is Reasonably Achievable 8.10-2 (Rev. 1-R, 1977). Regulatory Guide 8.10, section 1.b, does not provide any support for this subcontention. The State provides no other support for this subcontention. The State's subcontention overlooks the fact that access control for radiation areas is discussed in the Applicant's License Application. See SAR at 7.1-6, 7.3-3 to 4 (Section 7.3.2, "Access Control"). The State has neither addressed, nor challenged the validity of, the portions of the Applicant's License Application addressing access control.

(v) Inadequate description of the program to maintain ALARA exposures of personnel servicing "leaking" casks. See State Petition at 112. The State provides no support for this subcontention of any kind, not even a reference to a regulatory guide. The State has provided no regulatory basis, factual basis, or reference document of any sort to show that such a program is required to be included in a License Application under 10 C.F.R. Part 72.

(vi) Inadequate description of the program for monitoring clean areas and dose rates in radiation. See State Petition at 112. The State provides no support for this subcontention of any kind, not even a reference to a regulatory guide. The State has provided no regulatory basis, factual basis, or reference document of any sort to show that such a program is required to be included in a License Application under 10 C.F.R. Part 72.

(vii) Inadequate description of information on formal audits and reviews of the radiation protection program. See State Petition at 112. The State references Regulatory Guide 8.8, section 4, "Radiation Protection Facilities, Instrumentation, and Equipment," for this subcontention on "audits and reviews of the radiation protection program." Id. Section 4 of Regulatory Guide 8.8 says nothing about "audits and reviews of the radiation protection program," and provides no basis or support for the State's subcontention. See Regulatory Guide 8.8, Information Relevant to Ensuring that Occupational Radiation Exposure at Nuclear Power Stations Will Be as Low as Is Reasonably Achievable 8.8-14 to 16 (Rev. 3, 1978). Furthermore, the State's subcontention overlooks the fact that formal audits and reviews of the radiation protection program are discussed in the Applicant's License Application. See SAR at 7.1-2, 7.1-3. The State has neither addressed, nor challenged the validity of, these portions of the Applicant's License Application.

h) Failure to Consider Accident Conditions

The State alleges that the License Application "has completely failed to include an analysis of accident conditions including accidents due to natural phenomena." See State Petition at 113. The State's assertion that the License Application has "completely failed" to address this issue is mistaken, and overlooks the relevant material in the Applicant's License Application that specifically addresses accident conditions, including natural phenomena. Chapter 8 of the Safety Analysis Report, "Accident Analysis," provides over 70 pages specifically addressing analyses of off-normal operating conditions and hypothetical accidents. See SAR at 8.1-1 to 8.4-4. The accident

conditions analyzed explicitly include accidents due to "natural phenomena." See id. at 8.1-1, 8.2-2 (earthquake), 8.2-16 (extreme wind), 8.2-20 (flood), 8.2-47 (lightning). The analysis also specifically evaluates the compliance of the facility with the requirements of 10 C.F.R. § 72.104 and 10 C.F.R. § 72.106. See, e.g., SAR at 8.1-18, 8.2-40. The State's contention does not address, or challenge the validity of, over 70 pages of the Applicant's License Application specifically addressing accidents. The State's contention that the License Application "completely failed to include an analysis of accident conditions including accidents due to natural phenomena" is baseless.

i) Airborne Effluents May Cause Unacceptable Exposures

The State contends that the License Application is deficient because the failure to adequately control airborne effluents "may cause unacceptable exposures to workers and the public." See State Petition at 113 (emphasis added). The State does not contend that the facility design "will cause" an adverse impact to workers and the public. See generally, id. The State does not provide any other discussion of this generalized statement. A statement that simply alleges that some matter ought to be considered isn't sufficient as an admissible contention. This generalized statement must be dismissed for failure to provide a sufficient basis to establish a litigable contention. The State's contention references "Basis 3(a) (Air Quality)" of Utah Contention T, without further explanation. State Petition at 113. This contention and basis are responded to in Applicant's Response to Utah Contention T.

Q. Utah Contention Q: Adequacy of ISFSI Design to Prevent Accidents

1. The Contention

The State alleges in Contention Q that:

> The Applicant has failed to adequately identify and assess potential accidents, and, therefore, the Applicant is unable to determine the adequacy *[sic]* the ISFSI design to prevent accidents and mitigate the consequences of accidents as required by 10 CFR 72.24(d)(2).

State Petition at 114. The asserted bases for the contention are set forth on pages 114-115 following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows, incorporating the specific allegations in its bases:

> The Applicant has failed to adequately identify and assess potential accidents, and, therefore, the Applicant is unable to determine the adequacy of the ISFSI design to prevent accidents and mitigate the consequences of accidents as required by 10 C.F.R. 72.24(d)(2) in that:
>
> a) The Applicant does not define "the most vulnerable fuel" and does not specify whether it includes fuel with leaks and cladding failures which has been stored under water for many years and dry for many more years. Nor does the Applicant provide the g loading that would cause such fuel to fail. See SAR at 8.2-32.
>
> b) The Applicant does not discuss "canister end accidents involving improperly constructed casks." (See SAR at 8.2-34). Furthermore, the Applicant has not provided assurance that one of the vendors of the canisters, SNC, has an adequate quality assurance (QA) and corrective action program that will identify and correct design control and fabrication deficiencies.
>
> c) The Applicant does not address lifting accidents at the Intermodal Transfer Facility (ITF) or during either rail

or highway transport, where significant damage could occur during an accident with potential resulting release of nuclear material.

2. Applicant's Response to the Contention

a) Failure to Define "Most Vulnerable Fuel" and to Provide "G" Loading at Which Fuel with Cladding Leaks Would Fail

The State contends that the Applicant has failed to adequately identify and assess potential accidents in that it has not defined "the most vulnerable fuel," including whether such fuel includes fuel with leaks and cladding failures, and has not specified the g loading that fuel with leaks and cladding failures that has been stored underwater for many years and dry for many more years can withstand. State Petition at 114.

First, this contention must be dismissed because it mistakenly claims that the Applicant failed to address a relevant issue in the Application. The State ignores that the SAR references the source of its definition of "the most vulnerable fuel," at R21, which is a study done by Lawrence Livermore National Laboratory on the capability of spent fuel rods to resist impact loads. See SAR at 8.2-32.[38] The study indicates that the "most vulnerable fuel" is the 17 x 17 Westinghouse fuel assembly. This fuel is considered the weakest "primarily because it has the worst combination of the longest unsupported length and the thinnest cladding wall thickness. Nevertheless, it can sustain a load in bending equivalent to 63 g's at 380 degrees Celsius without exceeding the yield strength of the cladding at that temperature." UCID-21246 at § 4.0, p.4. Thus, the Applicant has

[38]The document, Reference 21 in Chapter 8 of the SAR, is entitled UCID-21246, Dynamic Impact Effects on Spent Fuel Assemblies, Lawrence Livermore National Laboratory, Chun, Witte, Schwartz, October 20, 1987.

defined "the most vulnerable fuel" in a document referenced in its SAR. A contention that mistakenly claims that an applicant fails to address a relevant issue must be dismissed. See Section II.C.2.

Second, this contention must be dismissed for lack of an adequate factual basis. The State alleges that Applicant has failed to consider the g loading at which fuel with leaks and cladding failures will fail. However, the State provides no factual basis to support its proposition that such fuel may fail at a g loading of less than 63 g. A statement that "simply alleges that some matter ought to be considered does not provide the basis for an admissible contention." The State has failed to provide an adequate basis here and therefore its contention must be dismissed. See Section II.C.1. supra at 13.

Third, this contention must be dismissed because, even if proven, it would not entitle the State to relief. Even if the State can prove that the fuel it described is likely to fail, the contention should be rejected because the storage canisters are designed to contain failed fuel. The NRC has made generic determinations in promulgating 10 C.F.R. Part 72 and certifying and approving spent fuel canisters under Subpart L of 10 C.F.R. Part 72 that there is no need to inspect the fuel cladding once a canister is filled with helium and sealed, since the canister serves as a means of confinement in lieu of the cladding. As the Commission stated in proposing rule changes to the design requirements: "[F]or storage of spent fuel the cladding need not be maintained if additional confinement is provided . . . . The canister could act as a replacement for the cladding." 51 Fed. Reg. 19,106, 19,108 (1986) (NRC proposed rule, codified at 10

C.F.R. Part 72) (citing NUREG-1092). The rule changes were adopted, 53 Fed. Reg. 31,651 (1988), and the applicable rule now provides:

> (h) *Confinement barriers and systems.* (1) The spent fuel cladding must be protected during storage against degradation that leads to gross ruptures or the fuel must be otherwise confined such that degradation of the fuel during storage will not pose operational safety problems with respect to its removal from storage. This may be accomplished by canning of consolidated fuel rods or unconsolidated assemblies or other means as appropriate.

10 C.F.R. 72.122(h) (emphasis added). Here, the spent fuel will be in canisters which will provide a barrier to the release of fission products from even failed fuel. In such circumstances, 10 C.F.R. § 72.122(h)(1) provides that the fuel cladding need not be protected from gross ruptures.[39] Therefore, even assuming the State could prove that the fuel cladding was subject to failure, the canistered fuel would still be within NRC safety regulations and the State would not be entitled to any relief. Therefore, the contention must be dismissed.

b) Possible Failure of a Canister Due to Fabrication Deficiencies Resulting in Fission Product Release

The State contends that the Applicant has failed to discuss canister end accidents involving improperly constructed casks. It expresses particular concern over the SNC casks, which it claims have suffered numerous design control and fabrication

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[39] Additionally, the technical specifications provided that failed fuel will be "confined in approved containers within the canisters," thus providing for two such confinement barriers. LA at App. A, p. TS-3; see also SAR 10.2-2.

deficiencies. Such a canister, claims the State, would be more likely to fail, resulting in the release of fission products to the environment.

This contention must be dismissed for lack of adequate basis. The State has suggested in a bald, conclusory statement, with no supporting factual basis — that SNC casks are more likely to fail. The State's contention implicitly suggests that the casks may fail spontaneously--a dubious proposition devoid of any factual support. The State has failed to provide any factual scenario or expert opinion explaining any other possible failure mechanism as required by 10 C.F.R. § 2.714(b)(2) and has ignored and has failed to provide any basis to impugn the effectiveness of the Applicant's Quality Assurance ("QA") program in identifying defective casks.

The State, in a conclusory fashion, alleges that "a canister with fabrication deficiencies could fail, and if it contained failed fuel, fission products could be released." State Petition at 114 (emphasis added). The State fails to explain a likely or even possible mechanism by which a canister with fabrication deficiencies could fail, and fails to describe a credible scenario by which fission products could be released. The State provides no bases to support its contention. The State's speculative assertion that a canister with fabrication deficiencies could fail and if so, fission products could be released, is a bald, conclusory allegation, and therefore, must be dismissed as "fatally flawed." See Section II.C.1. supra.

Moreover, the State ignores the Applicant's QA program described in SAR Chapter 11 for performing independent audits and assessments. As stated in section 11.1.1, the PFS QA Committee is

> [r]esponsible for maintaining the QA Program, assessing the effectiveness of the program by performing independent assessments and audits, and qualifying subcontractors and suppliers. The QA committee has the authority to "stop work" in cases where project activities are not in compliance with specifications, procedures, codes, standards, or regulations or when the quality of Structures, Systems, and Components (SSCs) are indeterminate.
>
> The QA Committee is an independent organization reporting to the Board of Managers and shall not be responsible for day to day activities, costs, or schedules. The QA Committee has the organizational freedom and authority to identify quality problems; to stop unsatisfactory work and assure that proper processing, delivery, installation, or use is controlled until proper disposition of a nonconformance, deficiency, or unsatisfactory condition; to initiate, recommend, or provide solutions; and to verify implementation of solutions. The QA Committee shall have sufficient access to all work areas necessary to perform their duties.
>
> The QA Committee oversight activities will include contract/specification preparation, oversight during procurement and fabrication activities, and receipt inspection. Fabrication oversight will include surveillance, inspection, and audits to ensure fabricator compliance with all contract and licensing documents. On-site shop inspections will be a large element of the oversight plan. Typical oversight activities include (but are not limited to) review of procurement documents, drawings, specifications, personnel qualifications, test and NDE reports, non-conformance reports, and as-built drawings. Contract documents will ensure that PFS personnel have access to the fabrication facilities to perform the above functions.

SAR at 11.1-2 and 11.1-3.

The State has failed to identify any basis why the Applicant's QA program, described above would fail to identify an improperly constructed cask. The State does not indicate why the extensive PFS QA oversight described above will not enable PFS to ensure that SNC's quality assurance and corrective action programs function to properly correct design control and fabrication deficiencies. Such failure requires dismissal of the contention.

c) Potential Cask Damage at ITF and During Transport Due to Cask Drop Accidents

The State contends that the Applicant must address not only lifting accidents while onsite at the ISFSI, but also at the ITF or during transport because the canisters are vulnerable to damage due to an accident. This contention must be rejected on two separate bases. First, contentions alleging transportation related issues must be rejected as beyond the scope of the proceedings. Second, there is no basis for the State's claim because storage casks will not be used at the ITF or during transit of the Spent Nuclear Fuel ("SNF"). Instead, shipping casks will be used. The design requirements referred to in this contention have no application to shipping casks, whose design requirements are set forth in 10 C.F.R. Part 71. See, e.g. 10 C.F.R. § 71.73(c)(1).

The State's Contention, that the Applicant must address lifting accidents at the ITF and during transport on either rail or highway, is beyond the scope of this proceeding. Contentions are not cognizable unless they are material to a matter that falls within the scope of the proceeding for which the licensing board has been delegated

jurisdiction as set forth in the Commission's Notice of Opportunity for a Hearing. See Section II.B., supra. The Notice of Opportunity for a Hearing in this case delineates the scope of the present licensing proceeding to include only the consideration of "an application . . . for a materials license, under the provisions of 10 CFR Part 72, . . . to possess spent fuel and other radioactive materials associated with spent fuel storage in an [ISFSI] located on the Skull Valley Goshute Indian Reservation . . . ." 62 Fed. Reg. 41,099 (1997) (Notice of Opportunity for a Hearing). While ISFSIs are licensed under Part 72, the transportation of spent fuel is governed by Part 71 and other provisions, but not Part 72. 10 C.F.R. § 71.0. Thus, this part of the State's contention, alleging possible transportation related accidents, must be rejected as beyond the scope of the hearing.

The second reason for rejecting this contention is that there is no basis for the State's claim. The State cites the SAR for the proposition that the cask maximum lift heights of 10 and 18 inches imply that vertical drops greater than these amounts would result in damage to the canister or interior contents. See SAR at 10.2-9. But the design requirements cited by the Applicant in its SAR apply only to storage casks which will not be in use at the ITF or during transit. Instead, shipping casks, which are subject to the design standards as set forth in Subpart F of Part 71 (§§ 71.71-77), will be used to transport the fuel to the site. These design standards differ from those for the storage casks, found at Subpart F (§§ 72.120-72.130). For example, shipping casks must undergo tests for hypothetical accident conditions such as the free drop test mandated by § 71.73(c)(1). That test requires a free drop of the cask from a height of 30 feet. Since the design criteria cited by the State are not applicable to the casks in use at the ITF and

during transport of the fuel, there is no basis for the State's claim that the casks are vulnerable to significant damage. Therefore, this contention must be rejected. § 2.714(d)(2)(i).

R. Utah Contention R: Emergency Plan

1. The Contention:

The State alleges in Contention R that:

> 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, at the transfer facility, or offsite during transportation.

State Petition at 116. The asserted bases for the contention are set forth in seven pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows, incorporating the specific allegations in its bases:

> 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, at the transfer facility, or offsite during transportation in that
>
> a) PFS has not adequately described the facility, the activities conducted there, or the area in sufficient detail to evaluate the adequacy and appropriateness of the emergency plan, nor has PFS considered specific impediments to emergency response such as flooding, ice, snow, etc.
>
> b) PFS has not identified adequate emergency and medical facilities and equipment to respond to an onsite emergency.
>
> (i) Tooele County capabilities and equipment are not

addressed adequately.

(ii) No provision for extra onsite preparedness given time for Tooele County to respond, particularly in adverse weather conditions.

c) The plan was not adequately coordinated with the State or other government (local, county, state, federal) agencies.

(i) PFS has not supported its claim regarding absence of extremely hazardous substances and that no assistance will be required external to Tooele County.

(ii) PFS does not address transportation accidents or accidents at the intermodal transfer point.

d) PFS has not adequately described means and equipment for mitigation of accidents, because it:

(i) Does not address how it would procure crane within 48 hours for tip over cask accident.

(ii) Does not adequately support capability to fight fires.

e) The Emergency Plan does not provide adequate detail to meet provisions of Reg. Guide 3.67, § 5.4.1 regarding equipment inventories and locations.

2. Applicant's Response to the Contention

The State raises a number of issues under Contention R, which we address in turn below.

a) Description of the Area and Activities and Impediments to Emergency Response

The State alleges that the Applicant has not adequately described the facility, its activities, and the surrounding area near the facility in sufficient detail to evaluate the adequacy of the appropriateness of the Emergency Plan ("EP"). State Petition at 116.

The State alleges that Regulatory Guide 3.67, Standard Format and Content for Emergency Plans for Fuel Cycle and Materials Facilities, (September 1990), requires the Applicant to include in its Emergency Plan the following:

- a list of hazardous chemicals used at the site (including quantities, locations of use and storage, and hazardous characteristics);
- a description of the access routes for emergency equipment with alternative routes for use under adverse conditions;
- a description of "potential impediments to traffic flow";
- a description of the types of terrain and the land use patterns around the site; and
- a description of the intermodal transfer point (ITP) and the liquid retention pond (including the "hazardous characteristics" of the storage pad runoff pond).

State Petition at 116-17. According to the State, the Applicant has not adequately addressed these issues and claims that the "Emergency Plan implementing procedures" which address the details, "should have been described in [the] its Emergency Plan." Id. at 117 (citing EP) at 2-7 and 5.1). Finally, the State alleges that Applicant has not adequately described impediments to emergency response including: flooding, high winds, range fires, ice and snow, and the presence of animals on the access roads to the ISFSI. Id. This subcontention must be dismissed, because it ignores relevant information in the license application and lacks basis as required by the Commission Rules of Practice. Furthermore, it is a collateral attack on Commission regulations, and, with respect to the ITP, raises issues beyond the scope of this proceeding.

(i) Ignoring Relevant Information and Lack of Sufficient Basis

This contention should be dismissed because it ignores relevant information in the application and lacks sufficient basis. The State essentially provides a "laundry list" of items that it claims must be included in the Emergency Plan, ignoring or failing to identify why the description in the EP is inadequate. Simply alleging that some matter ought to be considered does not provide a sufficient basis for an admissible contention. This is particularly true where the petitioner ignores relevant material submitted by the Applicant. See Section II.C. supra.

Here, the State has essentially ignored significant information set forth in the License Application pertaining to the very topics that it claims must be addressed. The Applicant has described at least two routes from Tooele City to the ISFSI that response organizations could use in responding to an emergency onsite. EP at 1-2 to 4, see Figures 1-1, 1-2 (maps of Tooele County area and PFSF site plan, including roads). The Applicant has described the area around the site, including the terrain (e.g., "The land . . . is extremely arid, characterized by some grasses, cactus, shrubs and rock outcroppings . . .") and the land use patterns, with the locations and populations of surrounding communities and the major employers for whom the people in the area work. Id. at 1-3.

In addition, the site area is described in great detail in the SAR. SAR at 2.1-1 to 2.2-4. Potential impediments to traffic flow are also described in detail in the SAR and the Environmental Report (ER) and include weather effects generally, SAR at 2.3-1 to 14, floods, SAR at 2.4-5 to 13, vehicular traffic, ER at 4.1-13 to 18, 4.3-7, 4.4-4 to 5, and animals, ER at 2.3-5 to 9. Because this subcontention ignores this considerable quantity of material the Applicant submitted, it must be dismissed.

Moreover, the State fails to supply any basis why the information provided is insufficient to meet the applicable regulatory requirement. 10 C.F.R. § 72.32(a) requires that an emergency plan must include "the following information:"

> (1) Facility description. A brief description of the licensee's facility and area near the site.

According to the Statement of Considerations:

> The purpose [of 10 C.F.R. § 72.32(a)(1)] is to provide the reader with enough basic information to evaluate the licensee's plan. Significant nearby facilities, such as schools, should be included in the site area description.

54 Fed. Reg. 14,051, 14,054 (1989). Beyond its bold conclusory allegations that the description in the EP is inadequate, the State provides no basis why the information provided -- for example, the description of the two routes from Tooele City to the ISFSI that response organizations could use in responding to an emergency on site -- is inadequate. Failing to provide such basis, the contention must be dismissed.

(ii) Collateral Attack on Agency Regulation

This subcontention must be dismissed as an impermissible collateral attack on the Commission's rules for advocating stricter requirements than those imposed by the regulations. As stated, 10 C.F.R. Part 72.32 requires the EP to include "a brief description of the licensee's facility and area near the site." 10 C.F.R. § 72.32(a)(1).[40] Furthermore, in this regard, contrary to the State's assertion, the Applicant need not include emergency plan implementing procedures with its application: "the Commission never intended the implementing procedures to be required for the 'reasonable assurance' finding and thus to be prepared and subject to scrutiny during the hearing. . . . [T]he Commission did not want licensing hearings to become bogged down with litigation about such details." Louisiana Power and Light Company (Waterford Steam Electric Station, Unit 3), ALAB-732, 17 NRC 1076, 1107 (1983); The Curators of the University of Missouri, CLI-95-8, 41 NRC 386, 398 (1995). As stated by the licensing board in Carolina Power & Light Comapny and North Carolina Municipal Power Eastern Agency (Shearon Harris Nuclear Power Plant, Units 1 and 2), LBP-84-29B, 20 NRC 389, 408 (1984):

> Implementablity is the characteristic of good *plans* . . . . Thus it is to the adequacy of planning that all the Commission's planning standards and evaluation criteria are directed . . . . The mechancal details implementing procedures largely consist of are almost never suitable for litigation.

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[40]While Part 72.32(a)(13) also requires certification that the Applicant has met its responsibilities under the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRTKA) with respect to hazardous materials at the facility, EPCRTKA does not require an Applicant to submit a list of hazardous substances with its EP. 40 C.F.R. § 355.30(a). See Subcontention (c)(i) infra.

Yet, this is the kind of detail that the State would have the Applicant include in the EP. Thus, for example, Applicant's statement in the Emergency Plan that "a list of all hazardous materials used at the PFSF" will be included in the implementing procedures is sufficient for purposes of the Emergnecy Plan. EP at 2.7.

Finally, Regulatory Guide 3.67, cited in State Petition at 116-17, is not binding on the Applicant (see The Curators of the University of Missouri, CLI-95-8, 41 NRC 386 at 397) and not all the provisions therein apply to ISFSIs, especially those, like the Applicant's, that do not handle or repackage spent fuel. Reg. Guide 3.67 was specifically developed for emergency planning under Parts 30, 40, and 70, not Part 72. Reg. Guide 3.67 at 1. Thus it does not reflect the fact that emergency planning requirements for ISFSIs that do not repackage or handle spent fuel, see Section 72.32(a), are less stringent than those for monitored retrievable storage (MRS) installations, see Section 72.32(b), and materials facilities that require emergency plans, see, e.g., Section 70.22(i)(1). Specifically, ISFSIs need only classify accidents up to and including "alerts," while MRSs and materials facilities must classify accidents up to and including "site area emergencies." Compare 10 C.F.R. §§ 72.32(a)(3) with 72.32(b)(3) and 70.22(i)(3)(iii). Facilities that must classify accidents up to "alert" do not require an offsite component to their emergency plans, while those that must classify accidents up to "site area emergency" do. 60 Fed. Reg. at 32,431-32. Therefore, while Reg. Guide 3.67 may provide general guidance for the preparation of emergency plans under Part 72, an applicant for an ISFSI license is not required to satisfy all its provisions. Therefore,

because the State seeks to have imposed stricter requirements than those actually imposed by the regulations, this subcontention must be dismissed.

(iii) Transportation Is Beyond Scope of This Proceeding

Finally, this subcontention is inadmissible because the intermodal transfer point and operations there, see State Petition at 117, are outside the scope of this hearing. As discussed in Section II.B. above, contentions are not cognizable unless they are material to a matter that falls within the scope of the proceeding for which the licensing board has been delegated jurisdiction as set forth in the Commission's Notice of Opportunity for Hearing. The Notice of Opportunity for Hearing in this case is for a materials license, under the provisions of 10 C.F.R. part 72. While ISFSIs are licensed under Part 72, the Applicant shows in the response to the State's Contention B, that the ITP and operations there are governed by DOT regulations, not NRC regulations, because operations at the ITP constitute the storage of spent fuel incident to transportation. Supra Response to State Contention B. Thus, this subcontention must be rejected as beyond the scope of the hearing.

b) Identification of Emergency and Medical Facilities

The State claims that the Applicant has not identified "adequate emergency and medical facilities and equipment to respond to an onsite emergency." State Petition at 117 (citing Reg. Guide 3.67). The EP also allegedly does not provide "a description of Tooele County's capabilities and training in handling wounds and emergency conditions involving radioactive materials." Id. at 117-118. The State also asserts that the EP omits

"[o]n-site and off-site training, monitoring, and protective equipment requirements." Id. (quoting letter from [Tooele County's Emergency Management Director] Kari Sagers (June 3, 1997), included in the EP).

This subcontention must be dismissed because it ignores relevant material submitted by the Applicant. Contrary to the State's claim, the EP does describe the capabilities of the Tooele Valley Medical Center. The EP notes that the Center "has about 38 beds and is equipped to provide decontamination and ambulance services." EP at 1-4. "An ambulance . . . will be stationed at the [ISFSI] to expedite transporting any seriously injured personnel to Tooele Valley Medical Center." Id. "Members of the [ISFSI] fire brigade will be trained in . . . advanced first aid." Id. Moreover, the site will be equipped with respirators, anti-contamination clothing, and radiation monitoring equipment to deal with a release of radioactivity available for site or Medical Center personnel to use. Id. at 3-9.

Regarding training of ISFSI personnel, Emergency Response Organization (ERO) personnel will receive specialized classroom or hands-on training related to their expected role during an emergency. Id. at 6-1. Training will include drills with individual instruction and annual retraining. Id. Training procedures will be promulgated; training topics are given in the EP. Id. at 6-1 to 2. Moreover, individuals in the PFS ERO will be cross-trained to enable emergency response positions to be staffed by any part of the organization. Id. at 4-2. ISFSI personnel outside the ERO will be trained in radiation protection, exposure guidelines, personnel monitoring devices, basic contamination control principles, and actions to take in a case of emergency. Id. at 6-2.

Regarding equipment, radiation dosimetry, monitoring, and surveying equipment will be located onsite, as will protective equipment, including respirators and anti-contamination clothing. Id. at 5-4. A fire truck and other firefighting equipment, including self-contained breathing apparatus, will also be located onsite. Id. at 5-8. Therefore, because the State again ignores the significant amount of material provided in the EP, this subcontention must be dismissed. See Section II.C.2. supra.

This subcontention must also be dismissed as an impermissible attack on the NRC's regulations for advocating stricter standards than they impose. The EP is not required to provide any greater detail regarding the capabilities of offsite emergency response organizations than it already does. See 10 C.F.R. § 72.32(a)(15). Section 72.32(a)(15) requires the EP to "include a brief description of the arrangements made for . . . effectively using off-site assistance . . . ." Id. (Emphasis added.) This is a "review and comment" requirement and does not require the EP to include any specific information. 60 Fed. Reg. at 32,433. Significantly, unlike Section 72.32(*b*)(15), Section 72.32(*a*)(15) does *not* include requirements to provide information regarding communications among offsite response organizations, emergency facilities and equipment, means for assessing the consequences of a radiological emergency, actual arrangements for medical treatment by offsite personnel, or radiological emergency response training provided to offsite response personnel. Compare 10 C.F.R. §§ 72.32(a)(15) with 72.32(b)(15)(i-vi); see also supra n. 1 (regarding Reg. Guide 3.67, cited in State Petition at 117). Furthermore, Section 72.32(a)(8) only requires the EP to provide "[a] commitment to and a brief description of the means to promptly notify

offsite response organizations and request offsite assistance, . . . for the treatment of contaminated injured onsite workers when appropriate." 10 C.F.R. § 72.32(a)(8). Nothing in Section 72.32(a) requires the EP to provide details of the response or treatment capabilities of offsite response organizations. See 10 C.F.R § 72.32(a). Therefore, this subcontention is an impermissible collateral attack on NRC regulations and must be dismissed.

(i) Tooele County Capabilities and Equipment

The State asserts that the Applicant should address whether the Tooele Valley Medical Center "actually has the expertise to handle radiological medical emergencies." State Petition at 118. "At the very least," the Applicant should "'[d]escribe the measures that will be taken to ensure that offsite agencies . . . have the necessary periodic training, equipment and supplies to carry out their emergency response functions.'" Id. (quoting Reg. Guide 3.67 § 4.3 and citing an absence of State records showing that the Utah Division of Radiation Control had provided training in responding to radiological incidents to Tooele Valley Medical Center personnel).

This subcontention too must be dismissed as an as an impermissible attack on the NRC's regulations for advocating stricter standards than they impose. As stated above, nothing in Section 72.32(a) requires the EP to provide details of the response or treatment capabilities of offsite response organizations. See 10 C.F.R § 72.32(a); see also supra n. 1 regarding Reg. Guide 3.67, cited in State Petition at 118. Furthermore, the NRC has stated, in response to public comments on the proposed rule, that Section 72.32

specifically does *not* require an ISFSI owner to provide for the training of or procure equipment for offsite response organizations:

> *Issue 19*. . . .This rule is an unfair burden on local emergency responders with little or no training for these types of emergencies. There is specialized training and equipment for radiation accidents and exposure; therefore, the proposed rules should provide for the training and obtaining equipment for the local responders.
>
> *Response*. The Commission disagrees.

60 Fed. Reg. at 32,433.

This subcontention must also be dismissed because it ignores relevant material submitted by the Applicant. The EP states that the Tooele Valley Medical Center "is equipped to provide decontamination and ambulance services." EP at 1-4. Regarding offsite emergency response personnel, Tooele County law enforcement personnel, fire response personnel and hospital and ambulance service personnel will be offered courses of specialized instruction in facility orientation, exposure guidelines, personnel monitoring devices, and basic contamination control principles. Id. at 6-2 to 3. Thus this subcontention must be dismissed.

(ii) Extra Onsite Preparedness

The State alleges that emergency support from Tooele Valley Medical Center and Tooele City is "at least two hours away from providing any real response." State Petition at 118 (citing Affidavit of Garth Bear, attached to OGD Petition to Intervene and Request for Hearing (September 12, 1997)). The State then claims that the Applicant "has not identified" what extra preparedness the ISFSI will possess because of this. Id. at 118-19.

This subcontention must be dismissed because it ignores relevant material submitted by the Applicant. See, e.g., Vogtle, LBP-91-21, 33 NRC at 424; Rancho Seco, LBP-93-23, 38 NRC at 247-49. The EP states: "An ambulance procured by the PFSF will be stationed at the PFSF to expedite transporting any seriously injured pesonnel to Tooele Valley Medical Center, as necessary." EP at 1-4. (Emphasis added.) "In order to enhance the response to fires, two fire trucks procured by the PFSF will be available for rapid response . . . . One fire truck will be stationed at the PFSF site, and the other will be stationed at the Goshute Village . . . ." Id. (Emphasis added.)

c) Coordination with Governmental Agencies

The State asserts that the Applicant has not adequately identified, notified or coordinated with "the principal State agency and other government . . . agencies . . . having responsibility for radiological or other hazardous material emergencies at the facility." State Petition at 119 (quoting Reg. Guide 3.67 § 4.4). The State also claims that the Applicant has not included the "local emergency planning committee established under [EPCRTKA] [or] State departments of health, environmental protection, and emergency and disaster control." Id. (quoting Reg. Guide 3.67 § 4.4).

This subcontention constitutes an as an impermissible attack on the NRC's regulations by advocating stricter standards than they impose. Nothing in Section 72.32(a) requires the Applicant to "identif[y], notif[y], or coordinate[]" with the types of organizations the State identifies. State Petition at 119 (quoting Reg. Guide 3.67 § 4.4); see 10 C.F.R. § 72.32(a); see also supra note 1 regarding Reg. Guide 3.67. Section

72.32(a)(8) requires the EP to include "a commitment to and a brief description of the means to promptly notify offsite response organizations and request offsite assistance . . . ." 10 C.F.R. § 72.32(a)(8). Section 72.32(a)(14) requires the Applicant to "allow the offsite organizations expected to respond in case of an accident 60 days to comment on the . . . [Applicant's] emergency plan before submitting it to the NRC." 10 C.F.R. § 72.32(a)(14). These two sections are to be read together as a requirement that "appropriate offsite agencies should be notified . . . of any classifiable accident at an ISFSI" and must therefore be allowed to review the Applicant's EP. 60 Fed. Reg. at 32,435.

The appropriate agencies, however, are those from which the Applicant has determined it will require services. Northern States Power Co. (Independent Spent Fuel Storage Installation) DD-97-24, 62 Fed. Reg. 51,916, 51,917 (1997). The Applicant has determined that it will require services only from Tooele County and, accordingly, has provided the EP to Tooele County emergency preparedness officials for their review. See Letter from Kari Sagers, Director of Tooele County Department of Emergency Management, to John D. Parkyn, Chairman, PFSLLC (June 3, 1997), in EP. There is no requirement that the Applicant include any other agencies as appropriate offsite response agencies. Northern States Power. As the NRC has determined, "[t]he nature of potential emergency events at ISFSIs do not require personnel from State and local governments to respond in a staff capacity." 60 Fed. Reg. at 32,433. Therefore, there is no requirement that the Applicant identify or notify any other offsite organizations and this subcontention must be dismissed as an impermissible collateral attack on the NRC's rules.

Further, this subcontention must be dismissed for failing to provide "[s]ufficient information . . . to show that a genuine dispute exists with the applicant on a material issue of law or fact." See Section II.C.2. supra. The State alleges that the Applicant has not "identified . . .the principal State agency and other government . . . agencies . . . having responsibility for . . . emergencies at the facility." State Petition at 119 (quoting Reg. Guide 3.67 § 4.4). Yet the State does not name any such authority or agency that the Applicant has allegedly not notified. See State Petition at 119. The State has merely quoted a passage from Reg. Guide 3.67 that generically describes "typical agencies to be included." Reg. Guide 3.67 at 7. Moreover, the State cites no legal authority to suggest any other organizations that the Applicant must include. See id. The State has not adequately provided the reasons for its belief that the application is inadequate. Therefore, this subcontention must be dismissed.

(i) Extremely Hazardous Substances

The State asserts that the EP must include a "list of hazardous materials used at the PFSF, including quantities, locations, use and storage requirements." State Petition at 119 (citing Reg. Guide 3.67 § 1.2).

This subcontention also advocates stricter standards than NRC's regulations impose. Seabrook, LBP-82-106, 16 NRC at 1656. While Section 72.32(a)(13) requires certification that the Applicant has met its responsibilities under EPCRTKA "with respect to hazardous materials at the facility," EPCRTKA only applies to facilities possessing "extremely hazardous substances" in amounts above specified regulatory thresholds; it

does not require an applicant to submit a list of hazardous substances with its emergency plan. 40 C.F.R. § 355.30(a); Pub. L. No. 99-499, § 302, 100 Stat. 1613, 1730 (1986); see also supra Subcontention (a)(ii) regarding Reg. Guide 3.67. The EP states that the ISFSI will not have extremely hazardous substances in amounts greater than the threshhold planning quantity of 40 C.F.R. § 355. EP at 2-6. The State does not challenge this commitment.

Thus subcontention must also be dismissed because it ignores relevant material submitted by the Applicant. The Emergency Plan states that "a list of all hazardous materials used at the PFSF, including quantities, locations, use and storage requirements[]" will be included in the Applicant's Emergency Plan implementing procedures. EP at 2-7; see Shearon Harris, LBP-84-29B, 20 NRC at 408 (details related to emergency response are more appropriate for implementing procedures than plans). Moreover, the State provides no basis for a contention that a listing in Emergency Plan implementing procedures fails to meet regulatory requirements.

(ii) Accidents Involving Transportation or the ITP

The State asserts that the application "has completely failed to address" responses to transportation accidents and accidents at the intermodal transfer point. State Petition at 119. The State claims that "[t]he management and handling of such a large volume of [spent fuel] will create a high potential for accidents having significant consequences to public health and safety." Id. at 120.

This subcontention is inadmissible because the ITP and operations there are outside the scope of this hearing. See Subcontention (a) supra. This subcontention must be dismissed as well because it lacks sufficient factual basis. Where a petitioner claims that an accident scenario will cause an accidental release of radioactive materials, it must support the claim by setting forth a "technical basis in references or expert opinion. The State provides no facts or analysis whatsoever to support its assertion that "[t]he management and handling of [the spent fuel casks] will create a high potential for accidents having significant consequences to public health and safety." See State Petition at 119-20. In fact, the NRC in promulgating the design and certification requirements for shipping casks has made the generic determination that such casks adequately protect public health and safety of spent fuel while in transit.[41] 31 Fed. Reg. 9941, 9942 (1966) (Packaging of Radioactive Material for Transport -- Final Rule). Thus the subcontention lacks sufficient basis and must be dismissed.

d) Mitigation of Accidents

The State alleges that "[t]he Applicant has not provided details to 'describe the means and equipment provided for mitigating the consequences of each type of accident.'" State Petition at 120 (quoting Reg. Guide 3.67).

The subcontention, however, ignores relevant material submitted by the Applicant. Chapter 3 of the EP, "Accident Detection, Mitigation, and Assessment of

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[41] See Fed. Reg. 9941, 9941 ("Packaging of Radioactive Material For Transport" - Final Rule) (July 22, 1966); 30 Fed. Reg. 15,750 ("Transport of Licensed Material, Notice of Proposed Rulemaking") (December 21, 1965).

Releases," describes each type of accident that could potentially occur at the ISFSI (including non-credible accidents) along with procedures the Applicant will take to respond to them. EP at 3-3 to 7. For example, the EP describes the procedures by which the Applicant would place a breached canister in a shipping cask or an overpack canister to mitigate the radiological consequences of the breach. Id. at 3-3 to 4.

Furthermore, this subcontention is an impermissible collateral attack on the NRC's regulations for advocating stricter standards than they impose. The regulations require the EP to include "[a] brief description of the means of mitigating the consequences of each type of accident [identified]." 10 C.F.R. § 72.32(a)(5). The Applicant need not include emergency plan implementing procedures with its application: "the Commission did not want licensing hearings to become bogged down with litigation about such details." Waterford, ALAB-732, 17 NRC at 1107; see supra Subcontention (a). Therefore, the details the State asks for are not required and this subcontention must be dismissed. See Section II.B. supra.

(i) Crane Procurement

The State implies that the Applicant must describe the "means and equipment" for restoring safe conditions to the site after a cask tip-over accident. State Petition at 120. Because the ISFSI will be located in a rural area, "the Applicant must identify with specificity the location from which a capable crane can be procured and the time . . . it will take to acquire such a crane." Id. at 121. "Furthermore, the Applicant must also

address its ability to locate a crane on-site within the 48 hour critical time limit during adverse weather conditions . . . ." Id. at 121.

This subcontention must be dismissed because it is an impermissible collateral attack on the NRC's regulations for advocating stricter standards than they impose. As stated supra regarding subcontention (d), an Applicant need not include emergency plan implementing procedures with its emergency plan. Furthermore, "regulation[s] do[] not require dedication of [planning] resources to handle every possible accident [scenario] that can be imagined. The concept of . . . regulation is that there should be core planning with sufficient planning flexibility to develop a reasonable *ad hoc* response to . . . very serious low probability accidents . . . ." Philadelphia Electric Company (Limerick Generating Station, Units 1 and 2), LBP-84-31, 20 NRC 446, 535 (1984) (quoting Southern California Edison Co. (San Onofre Nuclear Generating Station, Units 2 and 3), CLI-83-10, 17 NRC 528, 533 (1983)). A cask tip-over accident is a non-credible event that could be caused only by beyond design basis earthquakes or tornados. EP at 3-4. Therefore, the Applicant need not provide more detailed procedures to respond to it and this subcontention must be dismissed.

(ii) Fire Fighting Capability

The State alleges that the EP must further examine whether the surface water storage tanks at the site would be large enough to hold sufficient water to fight a serious fire. State Petition at 121. Moreover, the EP allegedly does not describe the program for maintaining any fire equipment. Id.

Again, the State ignores relevant material in the Application submitted by the Applicant. The onsite water storage tanks will be sized to handle onsite firefighting and other PFS needs. SAR at 2.5-5, 4.3-4 to 5. Additional water, if needed, can be obtained from the Reservation's water supply. ER at 4.2-4. The SAR describes the ISFSI's maintenance program, which covers the cask transfer building fire suppression system, fire pumps, and the fire engine. SAR at 4.3-6 to 7.

This subcontention must also be dismissed because it provides no factual basis for believing that the water tanks will be sized incorrectly. A statement that simply alleges that some matter ought to be considered does not provide a sufficient basis for an admissible contention. See Section II.C.1 supra. Because the State merely alleges that the Applicant should examine the issue of the sizing of the water tanks further, see State Petition at 121, this subcontention must be dismissed.

e) Equipment Inventories and Locations

The State alleges that the Applicant has not provided adequate information regarding "specific protective, communication, medical, contamination control, decontamination, fire fighting, radiation detection and hazardous material detection equipment with inventory lists and specific locations of the equipment." State Petition at 122 (citing EP at 5-8 to 5-9). According to the State, emergency response personnel may need such information. Id. Furthermore, the EP allegedly provides no description of the means for distributing equipment or the criteria for issuing it, as required by Reg. Guide

3.67 § 5.4.1.2. Id. The contention suffers from the same two faults as the preceeding State contentions.

First, it would impose stricter standards than NRC's regulations. As stated supra regarding Subcontentions (a), (d), and (d)(i), an Applicant need not include emergency plan implementing procedures with its emergency plan. The inventory and location of emergency response equipment, and the means of and criteria for distributing it in an emergency, are mechanical details implementing procedures largely consist of [and] are almost never suitable for litigation. Shearon Harris, LBP-84-29B, 20 NRC at 408. "[L]itigation on emergency planning is first and foremost concerned with the plans" rather than emergency facilities, equipment, and supplies. See Limerick, LBP-84-31, 20 NRC at 528. Such information is not required in the EP; hence this subcontention must be dismissed.

Second, the subcontention must also be dismissed because it ignores relevant material submitted by the Applicant. The Applicant has described safety and emergency response equipment in many places in the application. See, e.g., SAR § 4.3.8 (fire protection systems); EP at 1-4 (ambulance and fire trucks), 1-5 (emergency response equipment, including communication equipment), 3-2 (radiation monitors), 3-5 to 7 (radiation monitors and firefighting equipment), 3-9 (contamination control equipment), 5-4 to 5 (radiation dosimetry and radiological assessment equipment), 5-7 (decontamination), § 5.5 (Emergency Response Equipment and Facilities). It has also described emergency response provisions which indicate how such equipment is to be

used in an emergency. Id. at 5-4 to 9. When a petitioner ignores such information in an Application, the contention must be dismissed.

S. Utah Contention S: Decommissioning.

1. The Contention

The State alleges in Contention S that:

> 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 CFR § 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 CFR § 70.3(b).

State Petition at 123. The asserted bases for the contention are set forth in eight pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its bases:

> 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 CFR § 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 CFR § 70.3(b) in that:
>
> a) The Applicant offers no reasonable assurance of being able to obtain a letter of credit, the means by

which it intends to provide reasonable assurance that funds will be available to decommission the IFSFI as required by 10 C.F.R. 72.30(b).

b) Contrary to Regulatory Guide 3.66, the Applicant does not provide the wording for the letter of credit or state that it will be irrevocable.

c) Although the application states that decommissioning will be preceded by off-site shipment of canisters containing the spent fuel, the shipment of spent fuel back to the originating nuclear power plants will not be viable at the time of decommissioning the IFSFI nor can one assume other off-site storage will be available.

d) The decommissioning cost estimates lack detail, are inconsistent, and are not justified, and moreover the Applicant has not comprehensively considered direct and indirect costs and has not taken a conservative approach in its estimates.

e) The decommissioning cost estimate ignores the potential for large accidents and associated release or contamination at the IFSFI.

f) The Applicant optimistically presumes no residual contamination on casks and pads and therefore its cost estimates are unrealistic.

g) The Applicant fails to identify the type of waste that will be generated at the facility and unrealistically assumes that there will be no canister leaks.

h) The Applicant inadequately addresses the decontamination of the storage casks. The Application does not discuss the process by which dismantling will occur, where dismantling will occur, and whether the Applicant will have trained personnel, suitable equipment and appropriate safety procedures to undertake this operation.

i) The Applicant has failed to adequately estimate the cost of decontaminating each storage cask liner in that it (i) is based on an unsupported assumption that only 20% of the typical liners will be

contaminated and (ii) may also be increased by Applicant's failure to provide a means for decontaminating all parts of the canisters. If the cost for decommissioning cask liners is larger than estimated, adequate funding cannot be assured because it would then depend on successful assessment of participating customers to pay the additional costs.

j) The Applicant does not describe the type of survey or the sampling protocol for the final site radiation survey and therefore it is impossible to determine the adequacy of the plan or its cost estimates.

k) The Applicant has failed to provide decommissioning procedures and costs for the intermodal transfer point.

2. Applicant's Response to the Contention

The State raises a number of issues under Contention S, which are addressed, in turn, below. At the outset, the Applicant draws the Board's attention to the pleading requirements for contentions concerning decommissioning and decommissioning funding that have been laid down in recent NRC case law. See e.g., Yankee Atomic Electric Co. (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1 (1996) [hereinafter Yankee Atomic I]; Yankee Atomic Electric Co. (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61 (1996) [hereinafter Yankee Atomic II]; Yankee Atomic Electric Co. (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235 (1996) [hereinafter Yankee Atomic III].[42] These standards apply to many if not all of the State's 11 decommissioning

[42] Although these cases discuss reactor decommissioning under the former provisions of 10 C.F.R. Part 50, (e.g.,Yankee Atomic III, supra,at 258), this case law is applicable to ISFSI decommissioning under Part 72 because the current Part 72 is very similar to the former Part 50 and was promulgated with it. 53 Fed. Reg. 24,018, 24,039-40 (promulgating Part 72 and former Part 50 decommissioning rules); compare 10 C.F.R. §§ 72.30, 54 (1997) with 10 C.F.R. §§ 50.75, 82 (1996).

subcontentions. Moreover, because the State has failed to meet the requirements in many of its subcontentions, it avoids needless repetition in our responses to them.

Preliminary Decommissioning Plan. Contentions regarding the accuracy or completeness of a decommissioning plan (or decommissioning funding plan) are admissible only if the contention also shows that the alleged deficiency in the plan "has some independent health and safety significance." Yankee Atomic III, CLI-96-7, 43 NRC at 256. Petitioners must show "some specific tangible link between the alleged errors in the [decommissioning] plan and the health and safety impacts they invoke." Id. at 258.

Contentions regarding the accuracy or completeness of a decommissioning plan that do have health and safety significance must allege more than mere uncertainty. Yankee Atomic I, CLI-96-1, 43 NRC at 8. It is unreasonable to require as much precision of an applicant's proposed decommissioning procedures at the time of licensing as will be required of its final procedures at the time of decommissioning. Id. Significant uncertainties today regarding the decommissioning of a facility 30 or more years into the future are inevitable. Id. Even contentions regarding plan deficiencies supported by expert opinions, but which lack supporting documentation or data, are inadequate as having insufficient basis. Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), CLI-93-3, 37 NRC 135, 150-51 (1993).

Decommissioning Funding. Challenges to the reasonableness of an applicant's decommissioning cost estimates are not admissible unless the petitioner shows that "there

is no reasonable assurance that the amount will be paid." Yankee Atomic I, CLI-96-1, 43 NRC at 9. Without such a showing, the only relief available would be "the formalistic redraft of the plan with a new estimate." Id. Such relief is not sufficient to warrant consideration of a contention because petitioners are only entitled to relief from the injury they rely upon to afford them standing in a hearing. Id. at 6. Because a mere redrafting of a financial plan would have no effect on the physical events taking place at a facility (i.e., the potential health and safety threats that provide petitioners with standing), petitioners are not entitled to such relief. See id. at 6, 9.

Furthermore, without some indication that an alleged flaw in a funding plan will result in an actual shortfall of funds needed for decommissioning, a contention will not satisfy the materiality requirement of 10 C.F.R. § 2.714. Yankee Atomic III, CLI-96-7, 43 NRC at 259. The legal standard is reasonable assurance of funds, not "ironclad" assurance. Id. at 260. Short of an allegation of a "gross discrepancy" in the decommissioning cost estimate, supported by the necessary factual basis, a contention alleging the inadequacy of the estimate or the funding plan will not be admitted. Id. Similarly, a contention that the description of a trust or surety arrangement contained in a plan is inadequate will also fail unless the intervenor can show that the alleged flaw in the plan will result in a shortfall of funds. Yankee Atomic II, LBP-96-2, 43 NRC at 84 n.20.

a) Assurance of a Letter of Credit

The State asserts that the Applicant has not provided reasonable assurance that funds will be available to decommission the ISFSI in that it offers no reasonable

assurance of being able to obtain a letter of credit. State Petition at 123 (citing 10 C.F.R. § 72.30(b)).

This subcontention should be dismissed because it attacks the Applicant's decommissioning funding plan without indicating that the alleged omission will result in an actual shortfall of funds needed for decommissioning. Thus it does not satisfy the materiality requirement of 10 C.F.R. § 2.714. Yankee Atomic III, CLI-96-7, 43 NRC at 259. The State claims that PFS is a "newly formed entity" and that the application includes no information regarding PFS's capital structure or assets. State Petition at 123. Yet nowhere does the State assert that the applicant will be *un*able to obtain a letter of credit. See id.; see also id. at 27-38 (State Contention E, incorporated by reference). A contention that the description of a trust or surety arrangement (like a letter of credit) contained in a plan is inadequate will fail unless the intervenor can show that the alleged flaw in the plan will result in a shortfall of funds. Yankee Atomic II, LBP-96-2, 43 NRC at 84 n.20. Thus this subcontention must be dismissed as immaterial because it does not make such a showing.

This subcontention should also be dismissed because the State does not show that the alleged deficiency in the Applicant's decommissioning funding plan "has some independent health and safety significance." Yankee Atomic III, CLI-96-7, 43 NRC at 256. The State does not mention health or safety at all in the subcontention. See State Petition at 123. In Contention E, incorporated by reference by State Petition at 123, the only reference the State makes to safety is a general statement that a licensee in financially strained circumstances would be more likely to take safety shortcuts than one

in good shape. State Petition at 33-34. Petitioners must show, however, "some specific tangible link between the alleged errors in the [decommissioning] plan and the health and safety impacts they invoke." Yankee Atomic III, CLI-96-7, 43 NRC at 258. The State asserts only a general safety impact (and that ostensibly at best) and the State does not link the impact to decommissioning in any way. See State Petition at 27-38, 123. Therefore, the subcontention must be dismissed.

b) Text and Irrevocability of Letter of Credit

The State asserts that the Applicant has not provided reasonable assurance that funds will be available to decommission the ISFSI in that it does not provide the wording for its letter of credit or state that it will be irrevocable. State Petition at 124 (citing Reg. Guide 3.66, Standard Format and Content of Financial Assurance Mechanisms Required for Decommissioning Under 10 CFR Parts 30, 40, 70 and 72 at 1-4).

Like subcontention (a), this subcontention should be dismissed because it attacks the Applicant's decommissioning funding plan without indicating that the alleged omission will result in an actual shortfall of funds needed for decommissioning and thus it does not satisfy the materiality requirement of 10 C.F.R. § 2.714. Yankee Atomic III, CLI-96-7, 43 NRC at 259. The State does no more than cite regulatory guidance that the Applicant "should" provide the text of its letter of credit with its application. See State Petition at 124 (citing Reg. Guide 3.66). It makes no assertion whatsoever that the amount of funds available for decommissioning will be inadequate. See id. Thus the subcontention should be dismissed.

Moreover, this subcontention must also be dismissed as an impermissible collateral attack on the NRC's regulations. The State asserts that the license application must include the text of the letter of credit. State Petition at 124. NRC regulations, however, do not require that the Applicant submit the text of the letter with the application. See 10 C.F.R. § 72.30(b). Section 72.30(b) requires that the application contain "information on how reasonable assurance will be provided that funds will be available to decommission the ISFSI . . . ." Id. (emphasis added) "This information must include a description of the method of assuring funds . . . ." Id. (emphasis added). Thus Part 72.30(b) does not require a license application to submit the text of the letter of credit with the application. See id. Therefore, this subcontention must be dismissed. See Section II.B. supra at 5-7.

Finally, like subcontention (a), this subcontention should be dismissed because the State does not show that the alleged deficiency in the Applicant's decommissioning funding plan "has some independent health and safety significance." Yankee Atomic III, CLI-96-7, 43 NRC at 256. The State does not mention health or safety at all in the subcontention. See State Petition at 124. Moreover, this subcontention should be dismissed because the relief granted to the petitioner would only be "the formalistic redraft of the [decommissioning] plan." Yankee Atomic I, CLI-96-1, 43 NRC at 9. The discrepancy the State asserts is only the omission of the text of the Applicant's letter of credit. State Petition at 124. Because the mere redrafting of a financial plan would have no effect on the physical events taking place at the ISFSI (i.e., the potential health and

safety threats that provide petitioners with standing), the State is not entitled to such relief. See id. at 6, 9. Therefore, this subcontention must be dismissed.

c) Shipping Spent Fuel from the Site

The State asserts that the Applicant will not be able to ship spent fuel from the site in order to proceed with decommissioning and that the decommissioning plan is inadequate because the Applicant plans on doing so. State Petition at 124 (citing LA Appendix B at 1-1; SAR at 9.6-1). The State asserts that "[i]t is not unrealistic to expect that . . . [the spent fuel casks] will remain [at the ISFSI] beyond the expected license term because there are no off site shipment options." State Petition at 125. The State specifically attacks the Applicant for "simply assum[ing]" that there will be a Federal repository available to take the ISFSI's spent fuel at the end of its license term. Id.

This subcontention must be dismissed because it seeks to litigate a generic determination made by the NRC. The NRC has determined that:

> there is reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century, and sufficient repository capacity will be available within 30 years beyond the licensed life for operation of any reactor to dispose of the . . . spent fuel originating in such reactor and generated up to that time.

10 C.F.R. § 51.23(a) (emphasis added). Therefore, the Applicant may indeed rely on the availability of a Federal fuel spent repository at the end of the license term of the ISFSI and for the shipment of spent fuel off-site prior to decommissioning. For attacking the

NRC's determination, this subcontention is "barred as a matter of law." See Section II.B. supra at 6-7.

d) Detail, Consistency and Justification of Cost Estimates

The State claims that the Applicant's decommissioning cost estimates lack detail, are inconsistent, and are not justified. State Petition at 126. The State claims that the Applicant has not justified the bases for all its decommissioning cost estimates and that they must be broken down with more specificity. Id. It also asserts that some of the Applicant's cost estimates appear inconsistent. Id. (citing LA Appendix B at 4-2 &3). It claims that the Applicant has not "comprehensive[ly] consider[ed] . . . both direct and all indirect decommissioning costs." Id. at 127 (quoting Draft Standard Review Plan for Spent Fuel Dry Storage Facilities, NUREG-1567 at 16-4). Finally, the State claims that "to ensure that sufficient decommissioning funds are available, the Applicant should take a conservative approach in estimating" a number of quantities that presumably drive decommissioning costs. Id.

This subcontention should be dismissed because it lacks sufficient factual basis. While the State asserts that the Applicant has failed to consider all the direct and indirect costs of decommissioning, it does not specify any costs that the Applicant has omitted. State Petition at 127. Thus the subcontention lacks facts. It also lacks expert opinion to support it and lacks references to specific sources and documents to establish said facts or opinion. Furthermore, to the extent that the subcontention asserts that the Applicant "should" be conservative regarding its estimates of quantities that presumably affect the

cost of decommissioning, this subcontention must be dismissed as lacking "sufficient information . . . to show that a genuine dispute exists with the [A]pplicant on a material issue of law or fact." 10 C.F.R. § 2.714(b)(2)(iii). The State provides no information whatsoever to support its implied assertion that the Applicant's estimates are not conservative. See State Petition at 127. Thus this subcontention must be dismissed.

Moreover, this subcontention must be dismissed because it challenges the reasonableness of the Applicant's decommissioning cost estimates without showing, that "there is no reasonable assurance that the amount will be paid." Yankee Atomic I, CLI-96-1, 43 NRC at 9. Without such a showing, the only relief available to the State would be "the formalistic redraft of the plan with a new estimate," and the State is not entitled to such relief. Id. at 6, 9. Further absent such a showing this subcontention does not satisfy the materiality requirement of Section 2.714. Yankee Atomic III, CLI-96-7, 43 NRC at 259. The State makes no argument at all that the Applicant will be unable to pay its decommissioning costs. See State Petition at 126-27. Thus this contention must be dismissed.

e) Potential for Large Accidents

The State alleges that the Applicant's decommissioning cost estimates ignore the potential for large accidents and associated releases or contamination. State Petition at 127. The State claims that the large number of casks to be handled at the ISFSI "argue[s] strongly" for anticipating such events and "making arrangements for a multimillion dollar increase in decommissioning [costs]." Id. at 127-28.

This subcontention must be dismissed because it alleges that accidents will cause "multimillion dollar" decommissioning cost increases without providing any "alleged facts or expert opinion which supports" its allegation and it provides no "references to . . . specific sources and documents . . . on which the petitioner intends to rely to establish [said] facts or expert opinion." 10 C.F.R. § 2.714(b)(2)(ii); see State Petition at 128.

Moreover, even assuming some potential for such accidents, this subcontention must be dismissed as an impermissible collateral attack on the Commission's rules for advocating stricter requirements than those imposed by the regulations. The regulations do not require that an applicant provide for decommissioning costs associated with remote, speculative accidents. Indeed the 10 C.F.R. Part 50 regulations decouple decommissioning requirements from the cost of decontamination following an accident. Compare 10 C.F.R. § 50.75 with 50.54(w). The decommissioning requirements for 10 C.F.R. Part 50 were promulgated at the same time as the initial decommissioning requirements for 10 C.F.R. Part 72 and likewise do not require funding for decontamination following remote, speculative accidents. Moreover, the decommissioning regulations for 10 C.F.R. Part 72, 10 C.F.R. § 72.30(b), require periodic updates to decommissioning cost estimates in order to provide for adjustments of decommissioning cost estimates over the life of a facility to account for changing economic and technical conditions, which would certainly encompass any remote, speculative accident. See 53 Fed. Reg. at 24,036. Thus NRC regulations do not require decommissioning cost estimates at licensing to address remote speculative accidents and

this subcontention must be dismissed for seeking to impose stricter requirements than the regulations provide.

f) Residual Contamination on Spent Fuel Casks and Pads

The State asserts that the Applicant optimistically presumes that there will be no residual contamination on the spent fuel casks and storage pads and thus its decommissioning cost estimates are unrealistic. State Petition at 128. It asserts that the Applicant's estimate that 10 percent of the storage pad area will need to be decontaminated is not justified because the Applicant has failed to account for contamination from canister releases. Id. (citing Contention J, basis 2(b), State Petition at 69-71).

First, like Subcontention (e), this subcontention must be dismissed because it fails to show that there is no reasonable assurance that decommissioning costs will be paid. Yankee Atomic I, CLI-96-1, 43 NRC at 9. The subcontention says nothing at all about the Applicant's ultimate ability to pay. See State Petition at 128. Moreover, short of an allegation of a "gross discrepancy" in the decommissioning cost estimate, supported by the necessary factual basis, a charge alleging the inadequacy of the estimate will not be admitted. Yankee Atomic III, CLI-96-7, 43 NRC at 259. Here pad decontamination represents less than 15 percent of the Applicant's projected decommissioning costs (LA Appendix B at 5-2) and therefore, even significant deviations in the cost of decontaminating the pads would not constitute a gross discrepancy. Thus, even if the Board were to infer that the State had claimed that the Applicant would not be able to pay

(which, however, it may not do, Georgia Tech, LBP-95-6, 41 NRC at 304), the State provides no facts or expert opinion to support such an inferred claim. See State Petition at 128. Furthermore, this subcontention must also be dismissed because the only relief it would warrant for the petitioner would be "the formalistic redraft of the [decommissioning] plan with a new estimate," and the petitioner is not entitled to such relief. Yankee Atomic I, CLI-96-1, 43 NRC at 6, 9.

Second, this subcontention must be dismissed because it lacks sufficient basis in fact or expert opinion to support its allegation that unanticipated contamination will result from canister releases. See 10 C.F.R. § 2.714(b)(2)(ii). In this subcontention, the State cites no facts or expert opinion to support its claim regarding canister releases. See State Petition at 128. In Contention J, basis 2(b), cited in State Petition at 128, the State asserts, supported solely by non-specific affidavit, that a) the canisters may not be clean when they leave their reactor sites and b) the surfaces of the canisters may become contaminated via "weeping," without providing any factual or documentary support.[43] See State Petition at 70. Contentions regarding decommissioning plan deficiencies supported solely by expert opinions, without documentation or data, are inadequate as having insufficient basis.

g) Waste Generation and Spent Fuel Canister Leaks

The State claims that the Applicant fails to identify the type of waste that will be generated at the ISFSI and unrealistically assumes that there will be no canister leaks;

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[43] We address this issue in more detail in our response to State Contention J.

thus its decommissioning plan is inadequate. State Petition at 128. Moreover, the State complains that the Applicant does not propose decontamination and decommissioning practices beyond its commitment to use conventional methods. Id. (quoting LA Appendix B at 2-3).

First, this subcontention must be dismissed for failing to provide "[s]ufficient information . . . to show that a genuine dispute exists with the applicant on a material issue of law or fact." 10 C.F.R. § 2.714(b)(2)(iii). The State asserts that the Applicant must identify the types of wastes to be generated at the ISFSI. State Petition at 128. Yet the State cites no authority whatsoever for its claim. Id. Furthermore, nothing in Section 72.30 requires the Applicant to identify the types of wastes it expects to generate at its facility. 10 C.F.R. § 72.30. "[I]f a petitioner believes that the application fails to contain information on a relevant matter as required by law, [it must identify] each failure and the supporting reasons for [its] belief." 10 C.F.R. § 2.714(b)(2)(iii). Because the State has not done so here, the subcontention must be dismissed. Moreover, where a petitioner claims that an accident scenario will cause an accidental release of radioactive materials, it must support the claim by setting forth a "technical basis in references or expert opinion." Georgia Tech, LBP-95-6, 41 NRC at 302. While the contention is supported by an affidavit, it does not set forth a technical basis. See State Petition at 128. Thus the subcontention must be dismissed.

Second, this subcontention must be dismissed because it attacks the accuracy or completeness of a decommissioning plan without showing that the alleged deficiency in the plan "has some independent health and safety significance." Yankee Atomic III, CLI-

96-7, 43 NRC at 256. The State asserts no health or safety significance, only that the Applicant has not identified the types of waste that the Applicant anticipates will be generated and that it does not provide sufficient detail regarding the decommissioning procedures it will use. State Petition at 128. Furthermore, petitioners must show "some specific tangible link between the alleged errors in the [decommissioning] plan and the health and safety impacts they invoke." Yankee Atomic III, CLI-96-7, 43 NRC at 258. Therefore, because the State has not invoked any health or safety impacts, let alone shown some specific, tangible link to them, this subcontention must be dismissed.

Finally, this subcontention must be dismissed because even contentions regarding the accuracy or completeness of a decommissioning plan that do have health and safety significance must allege more than mere uncertainty. Yankee Atomic I, CLI-96-1, 43 NRC at 8. It is unreasonable to require as much precision of an applicant's proposed decommissioning procedures at the time of licensing as will be required of its final procedures at the time of decommissioning. Id. See 10 C.F.R. § 72.54(g) (requirements for *final* decommissioning plan). Significant uncertainties today regarding the decommissioning of a facility 30 or more years into the future are inevitable. Yankee Atomic I, CLI-96-1, 43 NRC at 8. Therefore, because the State merely asserts that the application is inadequate because of uncertainties regarding the types of waste that will be generated at the ISFSI and the exact procedures the Applicant will use to decommission the facility, this subcontention must be dismissed.

h) Decontamination of the Spent Fuel Storage Casks

The State alleges that the Applicant inadequately addresses the decontamination of the spent fuel storage casks. State Petition at 129. It alleges that the Applicant has provided insufficient detail regarding decommissioning plans and costs because it has not discussed the process by which it will dismantle contaminated casks. Id.

First, like Subcontention (g), this subcontention must be dismissed because it attacks the accuracy or completeness of a decommissioning plan without showing that the alleged deficiency in the plan "has some independent health and safety significance." Yankee Atomic III, CLI-96-7, 43 NRC at 256. The State asserts only that the Applicant has not provided sufficient detail regarding the cask decontaminating procedures it will use and shows no health or safety significance outside baseless speculation regarding whether the Applicant "will have . . . appropriate safety procedures to undertake this operation." State Petition at 129. Moreover, petitioners must show "some specific tangible link between the alleged errors in the [decommissioning] plan and [any] health and safety impacts they invoke." Yankee Atomic III, CLI-96-7, 43 NRC at 258. Therefore, because the State has not invoked any health or safety impacts, let alone shown some specific, tangible link between them and the alleged error in the decommissioning plan, this subcontention must be dismissed.

Second, as with Subcontention (g), this subcontention must be dismissed because even contentions regarding the accuracy or completeness of a decommissioning plan that do have health and safety significance must allege more than mere uncertainty. Yankee

Atomic I, CLI-96-1, 43 NRC at 8. Here, the State alleges no more than that. See State Petition at 129. Therefore, this subcontention must be dismissed.

i) Cost of Decommissioning of Storage Cask Liners

The State asserts that the Applicant has failed to adequately estimate the cost of decontaminating each storage cask liner. State Petition at 129. It asserts that the Applicant's estimate of the fraction of the liner that will be contaminated is unjustified. Id. It also asserts that errors in the estimate could cause a shortfall of funds in that cask decommissioning is paid for by participating customers on a predetermined per cask basis. Id. at 129-30.

This subcontention must be dismissed because it lacks sufficient factual basis. Short of an allegation of a "gross discrepancy" in the decommissioning cost estimate, supported by the necessary factual basis, a charge alleging the inadequacy of the estimate or the funding plan will not be admitted. Yankee Atomic III, CLI-96-7, 43 NRC at 260 (emphasis). The legal standard for adequacy of a decommissioning funding plan is a reasonable assurance of funds, not "ironclad" assurance. Id. Here, the State provides no basis at all in fact or opinion for its claim that the Applicant's estimate of the typical fraction of the area of the fuel cask liner that will be contaminated is wrong. State Petition at 129; see 10 C.F.R. § 2.714(b)(2)(ii). Therefore, there is no basis for its claim that the amount of decommissioning funding provided for in the Applicant's plan is insufficient and the subcontention must be dismissed.

This subcontention must also be dismissed because it attacks the accuracy of a decommissioning funding plan without showing that the alleged deficiency in the plan "has some independent health and safety significance." Yankee Atomic III, CLI-96-7, 43 NRC at 256. The State claims no health and safety significance for the alleged error in the plan, only that the Applicant may not be able to assure adequate funding. State Petition at 129-30. Petitioners must show "some specific tangible link between the alleged errors in the [decommissioning] plan and the health and safety impacts they invoke." Yankee Atomic III, CLI-96-7, 43 NRC at 258. Here, the State invoked no health or safety impacts at all, so the subcontention must be dismissed.

j) Final Site Radiation Survey

The State claims that the Applicant fails to describe "the type of survey or the sampling protocol" for the final site radiation survey and thus it is impossible to determine the adequacy of the Applicant's survey cost estimates. State Petition at 130 (citing 10 C.F.R. § 72.30(a)).

This subcontention must be dismissed as a collateral attack on the NRC's regulations for advocating stricter requirements than they impose. Seabrook, LBP-82-106, 16 NRC at 1656. Under the guise of its claimed need for precision in the cost estimate, the State seeks to require as much precision of an applicant's proposed decommissioning plan at the time of initial licensing as will be required of its final procedures at the time of decommissioning. However, the NRC regulations expressly require an ISFSI licensee to submit "[a] description of the planned final radiation survey"

with its final decommissioning plan (10 C.F.R. § 72.54(g)(4)) not as part of the proposed decommissioning plan under 10 C.F.R. § 72.30(a). Thus, this subcontention must be dismissed. Moreover, the State's claim of lack of precision in the cost estimate resulting from a more detailed description of the final radiation survey is no more than an allegation of mere uncertainty insufficient under the Commission's decision in Yankee Atomic I, CLI-96-1, 43 NRC at 8. Thus, this subcontention must be dismissed.

This subcontention is also inadmissible because it attacks the completeness of the Applicant's decommissioning and decommissioning funding plans without showing that the alleged deficiencies in the plans "ha[ve] some independent health and safety significance." Yankee Atomic III, CLI-96-7, 43 NRC at 256. The State asserts no health or safety significance to this subcontention at all, only that the amount of information provided is inadequate. State Petition at 130. Moreover, the State has also failed to show any "specific tangible link between the alleged errors in the plan[s] and [any] health and safety impacts" one might infer from this subcontention. Yankee Atomic III, CLI-96-7, 43 NRC at 258. Therefore, it must be dismissed.

Finally, regarding the State's allegation that the cost estimates for the site radiation survey are inadequate, this subcontention must be dismissed because it fails to show that "there is no reasonable assurance that the amount will be paid." Yankee Atomic I, CLI-96-1, 43 NRC at 9; State Petition at 130. Without such a showing the only relief available would be "the formalistic redraft of the plan with a new estimate." Yankee Atomic I, CLI-96-1, 43 NRC at 9. The State is not entitled to such relief. Id. at 6, 9. Furthermore, because the subcontention does not indicate that the alleged flaw in

the funding plan will result in an actual shortfall of funds needed for decommissioning (see State Petition at 130), it does not satisfy the materiality requirement of 10 C.F.R. § 2.714. Yankee Atomic III, CLI-96-7, 43 NRC at 259. Therefore, it must be dismissed.

k) The Intermodal Transfer Point

The State alleges that the Applicant has failed to provide decommissioning procedures and costs for the intermodal transfer point (ITP). State Petition at 130.

This subcontention is inadmissible because the ITP and operations there are outside the scope of this hearing. As discussed in Section II.B. above, contentions are not cognizable unless they are material to a matter that falls within the scope of the proceeding for which the licensing board has been delegated jurisdiction as set forth in the Commission's Notice of Opportunity for Hearing. We show in our response to the State's Contention B that the ITP and operations there are governed by DOT regulations, not NRC regulations, because operations at the ITP constitute the storage of spent fuel incident to transportation. See supra, Response to State Contention B. Thus this subcontention must be rejected as beyond the scope of the hearing.[44]

T. Utah Contention T: Inadequate Assessment of Required Permits and Other Entitlements

1. The Contention

The State alleges in Contention T that:

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[44]DOT regulations cover the removal of hazardous materials following leakage from packages in transit. See 49 C.F.R. § 174.57 (Cleaning cars and property); 49 C.F.R. § 174.750 (Incidents involving leakage).

> In derogation of 10 C.F.R. § 51.45(d), the Environmental Report does not list all Federal permits, licenses, approvals and other entitlements which must be obtained in connection with the PFS ISFSI License Application, nor does the Environmental Report describe the status of compliance with these requirements.

See State Petition at 131. According to the State, NEPA requires the NRC to fully assess any permit, license, approval or other entitlement required to be obtained in connection with the License Application. The nine specific aspects in which the State asserts that PFS has failed to do are set forth in pages 131 to 141 of the State's Petition. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations raised in its bases:

> In derogation of 10 C.F.R. § 51.45(d), the Environmental Report does not list all Federal permits, licenses, approvals and other entitlements which must be obtained in connection with the PFS ISFSI License Application, nor does the Environmental Report describe the status of compliance with these requirements in that:
>
> a) The Applicant has failed to show that it is entitled to use the land for the ISFSI site and if it does have such right whether there are any legal constraints imposed on the use and control of the land: the NRC must require the Applicant to fully disclose all provisions of the Applicant's lease with the Skull Valley Band in order to fully evaluate under what conditions that Applicant is entitled to use and control the site.
>
> b) The Applicant has shown no proof of entitlement to build a transfer facility at Rowley Junction or right to use the terminal there; nor has it identified the number of casks expected on each shipment, or explained the effects of rail congestion or whether Rowley Junction has the capacity of handling the expected number of

casks; nor has it shown that Union Pacific is willing and capable to handle shipments to Rowley Junction.

c) The Applicant has shown no ability or authority to build a rail spur from the rail head at Rowley Junction to the proposed ISFSI site.

d) The Applicant has shown no basis that it is entitled to widen Skull Valley Road or that the proposed 15-foot wide roadway would satisfy health, safety and environmental concerns.

e) The proposed PFSF is subject to Part 75 and the Applicant must supplement its submittal with relevant Part 75 information.

f) The Applicant's air quality analysis does not satisfy the requirements of 10 C.F.R. § 51.45 in that the Applicant has failed to adequately analyze whether it will be in compliance with the health-based National Ambient Air Quality Standards, whether it is subject to section 111 of the Clean Air Act, and whether it is a major stationary source of air pollution requiring a Prevention of Significant Deterioration permit; the Applicant's analysis of air quality impacts in ER 4.3.3 is inadequate; and a state air quality approval order under Utah Code Ann. § 19-2-108 will be required.

g) The Applicant has not addressed the requirement to obtain a Utah Groundwater discharge permit.

h) The Applicant's analysis of other required water permits lacks specificity and does not satisfy the requirements in that the Applicant merely states that it "might" need a Clean Water Act Section 404 dredge and fill permit for wetlands along the Skull Valley transportation corridor and that it will be required to consult with the State on the effects of the intermodal transfer site on the neighboring Timpie Springs Wildlife Management Area.

i) The Applicant must show legal authority to drill wells on the proposed ISFSI site and that its water appropriations will not interfere with or impair existing water rights.

2. Applicant's Response to the Contention

The State raises a host of issues under its Contention T. We address in turn below each of the specific allegations raised by the State in Contention T as set forth above.

a) Entitlement to Use and Control of the Proposed Site.

The State contends that PFS "has failed to show that it is entitled to use the land for the ISFSI site and if it does have such right whether there are any legal constraints imposed on the use and control of the land." State Petition at 131. (The State makes similar arguments with respect to the intermodal transfer point, the railroad spur and the widening of Skull Valley Road.) This contention must be rejected as an impermissible collateral attack on NRC regulations and for lack of basis.

Contrary to the State's contention, no statute or regulation requires an applicant to own or control a site before an application even for a nuclear facility may be considered. See, e.g., Concerned Citizens of RI v. NRC, 430 F. Supp. 627, 632 (D. R.I. 1977); Puerto Rico Electric Power Authority (North Coast Nuclear Plant, Unit 1), ALAB-662, 14 NRC 1125, 1136 (1981); New England Power Company (NEP, Units 1 and 2), LBP-78-9, 7 NRC 271, 277 (1978). As stated by the District Court in Concerned Citizens, the NRC has a "settled practice" of permitting docketing and consideration of applications for construction or licensing at a site before the applicant acquires ownership or control of the site. Concerned Citizens, 430 F. Supp. at 632 n.9. Accord North Coast, ALAB-662, 14 NRC at 1136; NEP, LBP-78-9, 7 NRC at 281. Rather, the real test is whether the applicant can produce the information required by regulation and necessary for an effective hearing; if it can, site ownership is irrelevant. Concerned Citizens, 430 F. Supp.

at 632-33; North Coast, ALAB-662, 14 NRC at 1136; NEP, LBP-78-9, 7 NRC at 277. While the focus of a hearing must be on a specific site, the site is no less specific because the Applicant does not yet own it. Concerned Citizens, 430 F. Supp. at 633 n.11; NEP, LBP-78-9, 7 NRC at 277.[45] Similarly, there is no such requirement for an ISFSI.

Thus, PFS need not own or have established control or entitlement with respect to the site for the proposed ISFSI (or for that matter with respect to intermodal transfer point, the rail spur or the widening of Skull Valley Road) before the NRC can consider PFS's license application. Accordingly, this contention must be rejected as a challenge to the basic structure of the Commission's regulatory process and an impermissible collateral attack on the Commission's rules. See Section II.B. supra.

Without citing to any part of the License Application which it claims is deficient, the State claims that "it is incumbent on NRC to require the Applicant to fully disclose all provisions of the lease in order that the NRC and petitioners may evaluate under what conditions the Applicant is entitled to use and control the site, the financial costs associated with the lease, the termination and frustration of purpose provisions, and

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[45] For example, in Concerned Citizens, the court rejected the intervenors' argument that the NRC must be blocked from reviewing and holding hearings on a utility's application for a license to construct two nuclear power plants because the utility did not yet own the site proposed for the plants, holding, as stated, that the only test for the application was whether the utility could produce the information required by law and necessary for an effective hearing. 430 F. Supp. at 629, 632-33. In NEP, intervenors in the same plant construction licensing proceeding in question in Concerned Citizens argued that the NRC must suspend the proceeding until the General Services Administration, which administered the site proposed for the plants, had determined whether it could transfer the site to the utility. NEP, LBP-78-9, 7 NRC at 272. The licensing board there rejected the argument, citing an absence of regulation requiring suspension. Id. at 283 (quoting Potomac Electric Power Co. (Douglas Point Nuclear Generating Station, Units 1 and 2, ALAB-277, 1 NRC 539, 542 (1975)). Furthermore, in the interest of fairness to all parties and in recognition of the obligation of the NRC to conduct its functions with efficiency and economy, the licensing board concluded that the NRC had to conduct its adjudications without unnecessary delays. Id. at 282 (quoting 10 C.F.R. § 2, App. A).

tribe's regulatory requirements." State Petition at 132. It cites absolutely no basis, legal or factual, for this assertion. Moreover, it completely ignores information which is contained in the License Application and the redacted version of the lease attached as Exhibit 15 to the State's Petition. The Environmental Report states that "[t]he direct costs of the PFSF include . . . annual costs associated with the Tribal lease" and provides the total life-cycle cost of the facility. ER at 7.3-1. Further, the redacted version of the lease, referenced in State Contention T, expressly provides that PFS "shall have exclusive control and use of the Facility Site." State Petition, Exh. 15 section I.A. This includes "the right to promptly remove any persons, equipment, or vehicles from the Facility Site" and "provide physical security for the Facility Site as necessary to comply with NRC regulations." Id.

Thus, this contention must be dismissed for lack of basis. Further, it must be rejected as an inappropriate request for discovery to overcome a lack of sufficient basis. 54 Fed. Reg. 33,168, 33, 171 (1989) ("[a] contention is not to be admitted where an intervenor has no facts to support its position and where the intervenor contemplates using discovery or cross-examination as a fishing expedition which might produce relevant supporting facts.") Accord, Duke Power Company, Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 NRC 460, 468 (1982), vacated in part on other grounds, CLIP-83-19, 17 NRC 1041 (1983)(Rules of Practice do not permit "the filing of a vague, unparticularized contention, followed by an endeavor to flesh it out through discovery against the applicant or staff.").

b) Intermodal Transfer Point

The State contends that the Applicant (i) completely ignores any discussion on proof of its legal entitlement, to build a transfer facility at Rowley Junction, (ii) "has not identified the number of casks expected on each shipment or explained the effects or rail congestion at Rowley Junction," (iii) "has not shown that Union Pacific Railroad is capable or willing to handle the shipment coming into Rowley Junction." and (iv) "has not demonstrated that it has the right to use a terminal at Rowley Junction . . . or that Rowley Junction has the capacity of handling the expected number of casks." State Petition at 133.

The sole basis offered by the State for the above contentions is that bald assertion that "[t]hese entitlements must be addressed as part of this licensing action." Id. This is plainly insufficient under the Commission's amended Rules of Practice. A statement that simply alleges that some matter ought to be considered does not provide a sufficient basis for an admissible contention. The State has identified no portion of the License Application which it claims is deficient and provides absolutely no basis -- legal or factual -- why these entitlements must be addressed. See Section II.C.1 supra.

Further, as discussed in subpart a above, an applicant need not have established legal entitlement to the site or related appurtenances at this stage of the licensing process. Thus, absent identifying with sufficient basis why some part of the License Application is deficient -- which the State has not done -- this subcontention must be dismissed.

Additionally, the contention must be dismissed for being beyond the scope of this proceeding. Contentions are not cognizable unless they are material to a matter that falls

within the scope of the proceeding for which the licensing board has been delegated jurisdiction as set forth in the Commission's Notice of Opportunity for Hearing. While ISFSIs are licensed under Part 72, the transportation of spent fuel (including the intermodal transfer at Rowley Junction is governed by Part 71 and other provisions, but not Part 72. 10 C.F.R. § 71.0. See Response to Utah Contention B.

c) Right to Construct a Rail Spur

The State claims that the Applicant has shown no authority or ability to build a rail spur from the railhead at Rowley Junction along Skull Valley Road to the proposed ISFSI site. State Petition at 133. In support of its position, it refers to certain alleged difficulties which it claims that PFS would need to overcome.

As set forth in subpart a, however, an applicant need not establish entitlement or control over property for the NRC to undertake a licensing proceeding. Rather, the test is whether an applicant can produce the information required by regulation and necessary for an effective hearing. If it can, ownership is irrelevant.

Here, the State has failed to identify any part of the License Application which it contends is deficient for lack of information, as a result of the claimed inability of PFS to construct a rail spur. Nor has the State supplied legal or any factual basis to support a claim that the License Application is deficient in any respect. Therefore, this subcontention must be dismissed.

d) Widening Skull Valley Road

The State claims that the Applicant has not shown (i) any basis by which it is entitled to widen Skull Valley Road and (2) no justification that a 15-foot wide road

could safely accommodate heavy haul trucks carrying spent fuel casks. The State claims that Applicant must show that it is entitled to widen the road and can transport spent fuel safely over a 15-foot wide roadway before the state or the NRC expend substantial resources. The State has supplied insufficient bases for both parts of this subcontention and the contention must be dismissed.

(i) Authority or Ability to Widen Road

The State claims that no roadwork may be done on state or county roads without permits from the proper authority, that there is no indication that Tooele County is in accord with Applicant's proposal,[46] and that it is incumbent on the Applicant to show that it is entitled to widen the road before the "petitioners and NRC expend enormous amounts of time and resources on this license application." State Petition at 135.

This subcontention must be dismissed for failing to raise a material issue and as lacking adequate legal basis. The fact that permits for roadwork have not yet been obtained or applied for and the possibility that such permit might not be granted is immaterial to this licensing proceeding. The application for and procurement of these permits and licenses may proceed simultaneously with the consideration of the proposal by the NRC. See, e.g., Wisconsin Electric Power Company (Koshkonong Nuclear Plant, Units 1 and 2), CLI-74-45, 8 A.E.C. 928 (1974); (Limerick Generating Station, Units 1 and 2), LBP-82-43A, 15 NRC 1423 (1982). The resolution of the issue of whether

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[46] Subsequent to the submittal of the State's contentions, the Utah State Transportation Commission voted to approve a request by the Governor to take over Skull Valley Road from Tooele County, a decision that requires legislative ratification. See "Tooele Rips Governor's Plan to Take Over Road", Deseret News (Dec. 4-5, 1997).

Tooele County or some other entity is or is not inclined to grant the applicable roadwork permit is immaterial to the decision to grant or deny the Applicant's ISFSI license.

(ii) Safety of Transit on Skull Valley Road

The State also argues that the Applicant has provided no justification to show that a 15-foot roadway is sufficient to accommodate the size and quantity of the heavy haul trucks that will use Skull Valley Road over the life of the ISFSI. State Petition at 135. This part of the subcontention must be dismissed as a challenge to NRC regulations and for lack of bases.

The State has come forward with no factual basis to support a challenge that a 15-foot roadway would not be sufficient to satisfy health, safety and environmental concerns. 10 C.F.R. § 2.714(b)(2) provides that "[e]ach contention must consist of . . . (ii) a concise statement of the alleged facts or expert opinion" supporting the contention together with references to "specific sources and documents . . . on which the petitioner intends to rely to establish those facts or expert opinion." Nowhere in its Petition does the State cite any facts or expert testimony which would support its contention that a 15-foot roadway would not be sufficient to satisfy health, safety and environmental concerns. Because the State's contention is unsupported by any factual basis whatsoever, it must be rejected at the threshold.

e) NRC Requirements under 10 C.F.R. Part 75

The State alleges that the proposed ISFSI is subject to 10 C.F.R. Part 75 and that therefore the NRC "must designate the PFS installation as subject to IAEA safeguards"

and the Applicant "must comply with Part 75 requirements as part of [this] Part 72 licensing proceeding," such as maintaining and following written material accounting and control procedures under 10 C.F.R. § 75.21 and providing information required under 10 C.F.R. § 75.14. State Petition at 136. The State, however, is wrong in its assertion that 10 C.F.R. Part 75 applies to this Part 72 licensing proceeding and therefore its contention must be dismissed for lack of sufficient basis.

10 C.F.R. § 75.2(a) provides that Part 75 applies "to all persons licensed by the Commission or Agreement States to possess source material or special nuclear material at an installation, as defined in § 75.4(k), on the United States eligible list . . . ." In turn, 10 C.F.R. § 75.2(b) defines the "United States eligible list" as the "list of installations eligible for IAEA safeguards under the U.S./IAEA safeguards agreement which the Secretary of State or [her] designee files with the Commission . . . ." 10 C.F.R. § 75.2(a) further provides that the IAEA safeguard provisions of Part 75 "apply to the extent specified in §§ 50.78, 40.31(g), 70.21(g) and 150.17a . . . to holders of construction permits and to persons who intend to receive source material or special nuclear material."

The proposed PFS ISFSI does not satisfy any of the above conditions for the application of 10 C.F.R. Part 75 requirements. Although an ISFSI licensed under Part 72 is an installation as defined in 10 C.F.R. § 75.4(k), and is subject to the IAEA safeguards provisions of Part 75 <u>if</u> on the United States eligible list, the PFS ISFSI is <u>not</u> on the United States eligible list of installations which is filed by the Secretary of State or her designee with the NRC. <u>See</u> "U.S. Sites and Facilities Eligible for IAEA Safeguards"

(May 1996). Therefore, it is not subject to 10 C.F.R. Part 75 under this provision of 10 C.F.R. § 75.2.

Further the proposed PFS ISFSI does not satisfy the other conditions specified in 10 C.F.R. § 75.2 for Part 75 to apply. PFS is not applying for a permit to possess and use more than one effective kilogram of source material. See 10 C.F.R. § 40.31(g). Nor has the NRC expressly requested that PFS comply with Part 75 as a holder of a construction permit, see § 50.78, or as an applicant for a permit to possess and use more than one effective kilogram of special nuclear material, see § 70.21(g). Finally, PFS does not hold and is not applying for a license with an Agreement State. See 10 C.F.R. § 150.17a.

Thus, 10 C.F.R. Part 75 and its IAEA safeguards provisions do not apply to the PFSF. Moreover, even assuming the PFSF were placed on the United States eligible list after being licensed, compliance of the PFSF with Part 75 requirements is not a licensing criterion to be heard and litigated in this proceeding. The meeting of IAEA safeguards is not one of the issues that must be favorably resolved under 10 C.F.R. § 72.40(a) for the issuance of the license. Moreover, it is not a health and safety issue that would affect the issuance of the license assuming that the NRC security provisions under 10 C.F.R. Part 73 are met. Therefore, this basis for Contention T must be dismissed under 10 C.F.R. § 2.714(d)(2)(ii) because, even if proven, the State would not be entitled to relief. See Section II.A. supra at 3-4.

f) Air Quality Standards and Requirements

The State raises various issues concerning air quality standards and requirements which are discussed below.

(i) National Ambient Air Quality Standards ("NAAQS")

The State claims that the Applicant's discussion of "air quality impacts" in section 4.3.3 of the Environmental Report "is totally inadequate." State Petition at 137. Specifically, the State claims that the Applicant "fails to discuss modeling techniques," and moreover that the SCREEN3 Model used by the Applicant is inadequate. According to the State, the Applicant "must complete a more refined dispersion analysis and describe the source of input information and assumptions--such as monitored hourly meteorological data sets (wind speed, direction, stability class, temperature, and mixing height), source data, background concentrations, and other contributing industrial sources--to show that there will be no potential violation of NAAQS or significant air quality impacts off the Reservation." Id. at 138.

This contention must be dismissed for ignoring relevant information in the Application and for lack of basis. The air quality impacts of the Facility's construction are addressed in Section 4.1.3 of the Environmental Report, (not Section 4.3.3 referenced by the State[47]) which discusses modeling techniques and analyzes the effects of construction related pollutant emissions on air quality in two respects, ER at 4.1-9. First, it estimates total emissions per month on the basis of estimated material usage and reasonable assumptions regarding construction vehicle mileage and hours of operation during the construction phase. Further, "all of the construction activities are

[47] Section 4.3.3 of the Environmental Report discusses the air quality impacts of the construction and operation of the Skull Valley Road transport alternatives.

conservatively assumed to be occurring simultaneously during any given construction month for purposes of these emissions estimates." Id.

Second, it uses the EPA SCREEN3 screening level dispersion model for assessing the potential impact of these construction related pollutant emissions on ambient concentrations in public areas. The report states that:

> This model calculates ground level concentrations of pollutants emitted from both point and area sources as a function of downwind distance utilizing either a standard matrix of meteorological conditions designed to produce worst case impact for user input meteorological conditions.

Id. (emphasis supplied)

The State completely ignores this analysis of air quality impacts in the Environmental Report. Further, although it takes issue with the use of the EPA SCREEN3 model, claiming that it is deficient, it provides no expert opinion or supporting documents or other sources on which it intends to rely to establish its claim. The need for such supporting information required by the Commission's rules is heightened in these circumstances where the model being challenged is one issued by the EPA for use in calculating the air quality impacts of emissions. Further, the State has provided no legal or factual basis why an allegedly more refined modeling is required here. Under NEPA, detailed analysis is only required where impacts are likely. Izaak Walton League of America v. March, 655 F.2d 346 377 (D.C. Cir. 1981). Yet the State has provided no factual basis to support any allegation regarding the significance or likelihood of the impact of ISFSI construction or operation on air quality. See State Petition at 137-38. Having failed to review Applicant's air quality analysis and the results, it has provided

absolutely no basis on which to support its claim that a more refined modeling may show significant air quality impacts in violation of NAAQS.

In short, the subcontention must be dismissed for failing to provide the required basis as required by the Commission's amended rules of practice.

(ii) PSD and Title V Permits

The State also claims that the Applicant has failed to adequately determine whether it is subject to regulation under Section 111 of the Clean Air Act and whether it is a major stationary source of air pollution requiring a Prevention of Significant Deterioration ("PSD") permit and a Title V permit. The State alleges as its basis for this part of the contention that the Applicant's statement that there are no air emission sources, including the emergency diesel generator, large enough to require a Clean Air Act Title V permit "falls far short of an adequate air quality analysis to satisfy the Clear Air [sic] Act or NEPA." State Petition at 137. The State asserts that construction will entail an onsite concrete batch plant used for the construction of storage pads, cask shielding and concrete building, which it claims is subject to Section 111 of the Clean Air Act, and to 40 C.F.R. Subpart I, New Source Performance Standards for Hot Mix Asphalt Facilities, and that as such, the PFS facility could be considered to be a major stationary source of air pollution required to obtain a PSD permit as well as a Title V permit. Id.[48]

[48] The State's Petition refers to an asphalt batch for the construction of construction storage pads, cask shielding and concrete buildings, citing to page 3.2-2 of the Environmental Report. That page refers to a concrete batch plant being used for such purposes, not an asphalt batch plant.

This subcontention must be dismissed for the State totally ignores the analysis of air emissions done by the Applicant in Section 4.1.3 of the Environmental Report and the results of that analysis is Table 4.1-4. The results show that the concrete batch plant would emit .6 tons of emissions per month or 7.2 tons per year. This is far below the 250 tons per year threshold for the PSD program and the 100 tons per year threshold for the Title V program. See 40 C.F.R. § § 52.21(b)(1)(i)(a) (PSD threshold for "non-listed" major sources), 71.3(a)(1) (Title V applicability threshold for major sources).[49] Thus, based on the analysis and emission estimates set forth in the Environmental Report, the Applicant is not subject to the PSD and Title V programs.

Not having considered the Applicant's analysis emission estimates, the State provides absolutely no basis on which to challenge their validity[50] and its contention must be dismissed.

(iii) Requirement for a State Air Quality Approval Order

The State also asserts that even if a PSD permit is not required, a state air quality approval order under Utah Code Ann. § 19-2-108 will be required. The sole basis for this assertion is that "[t]he concrete batch plant, asphalt batch plant, and other air emission sources, even if located on the Skull Valley reservation, because of the limited size of the

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[49] Major source status for PSD applicability is based on annual potential emissions of regulated pollutants from stationary sources. A major source is one which has potential emissions of 250 tons per year or greater of a regulated pollutant unless it belongs to one of 28 source categories. The PFSF is not among the 28 categories and, as discussed in the text above, its potential emissions fall far short of the minimum threshold for a major source. See 40 C.F.R. § 52.21(b)(1)(i)(b) (28 categories of "listed" major sources).
[50] The State cannot even rely upon the alleged inadequacies in the EPA SCREEN3 model since the results in Table 4.1-4 were not derived using that model. See ER at 4.1-9.

reservation, will have a significant impact on state air resources." State Petition at 139. No facts or supporting documents are supplied to support this bald assertion and it must be rejected for a total lack of basis. There is a reason why the State cites no basis.

First, no state air quality order of approval is required because the State has no jurisdiction or authority to require such an order for activities on the Skull Valley Reservation. As discussed more fully below, in response to the State's claimed need for a state ground water discharge permit, the Skull Valley Band is not subject to the State's environmental regulatory authority absent an express congressional delegation of such authority to the State. In regard to air quality, no such delegation has been provided. The Clean Air Act authorizes EPA to delegate authority over Indian reservations only to Indian tribes. It does not authorize EPA to delegate such authority to the states. 42 U.S.C. § 7601(d). See also, Nance v. EPA, 645 F.2d 701, cert. denied, sub nom. Crow Tribe of Indians v. GPA, 454 U.S. 1081 (1981) (9th Cir.) (rejecting state challenge of EPA delegation of air quality regulation to Indian tribe); 59 Fed. Reg. 43,956 (Aug. 25, 1994) (proposed EPA regulations for air quality planning and management by Indian tribes). Consistent with this statutory limitation, EPA's delegation of CAA authority to Utah does not include authority over Indian country. 60 Fed. Reg. 30,192-95 (Jun. 8, 1995) (Clean Air Act Final Full Approval of Operating Permits Program; Approval of Construction Program Under Section 112(1)). Thus, it is clear that Congress intended that regulation of the environment on Indian reservations be left to the federal government and the respective Indian Tribes and not the states.

Second, the State has supplied no factual basis to support its assertion that the air emission sources located on the Skull Valley Reservation will have a significant impact on State air resources because of the limited size of the reservation. Even if the facility were located on property over which the State had jurisdiction, Applicant has demonstrated, as discussed above, that the air emissions produced by the PFSF would fall below the minimum threshold levels of concern. The State has provided no facts or expert opinion to support its position of significant impact and its contention amounts to a bald, conclusory allegation. The failure to comply with the requirements of 10 C.F.R. (b)(2)(ii) is also grounds for dismissal of the contention.

g) Utah Ground Water Discharge Permit

The State claims that the Applicant has not addressed the requirement to obtain a Utah ground water discharge permit in accordance with Utah Code Ann. § 19-5-107 and Utah Admin. Code R317-6. In support of this contention, the State asserts that "[t]he State of Utah, as trustee and in its capacity of *parens patriae*, has jurisdiction over all groundwater within the State." Utah Code Ann. § 73-1-1. According to the State, an Indian tribe may have an implied reservation of water under the Winters doctrine (referring to Winter v. United States, 207 U.S. 564 (1908)), but an implied right to the use of water under certain conditions does not restrict State jurisdiction over groundwater quality. State Petition at 139-140.

This contention must be dismissed as lacking adequate basis. The PFS application does not address obtaining a Utah groundwater discharge permit because the State has no jurisdiction to regulate or require permits for activities on the Skull Valley

Reservation. Further, even if Utah's groundwater discharge permit program did apply on the Reservation, the activities proposed by PFS would not require a permit.

The Skull Valley Band of Goshute Indians is a federally recognized tribe occupying a federally-created, fully enclosed reservation. Indian tribes are sovereign nations with exclusive jurisdiction and control over activities on their lands, subject to the plenary authority of Congress to legislate in the field of Indian affairs under the Indian Commerce Clause of the Constitution. United States v. Mazurie, 419 U.S. 544, 557 (1975) (the sovereign authority of Indian Tribes extends "over both their members and their territory.") As a matter of general Federal Indian law, state agencies have no civil judicial or regulatory authority over activities in "Indian country" (which includes the reservation lands of the Skull Valley Band) absent an express congressional authorization. See, New Mexico v. Mescalero Apache Tribe, 462 U.S. 324 (1983). See also, Williams v. Lee, 358 U.S. 217, 220 (1959) (absent contrary federal authority, a state may not exercise regulatory authority over a tribe or its land that infringes upon tribal self-government); Worchester v. Georgia, 31 U.S. 6 Pet., 515 (1832) (holding the laws of Georgia have no force and effect on the Cherokee Nation's lands).

Further, these general principles have been expressly or implicitly recognized in cases involving environmental regulation of activities on Indian reservations. See, *e.g.*, Nance v. EPA, 645 F.2d 701, 713 (9th Cir. 1981), cert. denied sub nom, 454 U.S. 1081 (in rejecting state's challenge of EPA's delegation of air quality regulation to tribe, court stated "we have little doubt that Congress assumed and intended that states had no power to regulate the Indian use or governance of the reservation . . . except as Congress chose

to grant that power," quoting Santa Rosa Band of Indians v. Kings County, 532 F.2d 655, 658 (9th Cir. 1975), cert. denied, 429 U.S. 1038 (1977); Washington Dep't of Ecology v. EPA, 752 F.2d 1465, 1467 (9th Cir. 1985) (court upheld EPA's determination that Washington could not apply its hazardous waste regulations to activities on Indian reservations, which was based on EPA's finding that "RCRA does not give the state jurisdiction over Indian lands, and that states could possess such jurisdiction only through an express act of Congress or by treaty").

Thus, the Skull Valley Band is a sovereign nation with exclusive regulatory jurisdiction over all activities and all persons on the Reservation, except as Congress has chosen to limit or assume that authority. There is no federal act giving the State of Utah authority to regulate or require permits for ground water discharges on the Reservation. Thus, there is no legal requirement for PFS to obtain a Utah groundwater discharge permit for its activities on the Reservation.

The State tries to escape this conclusion by asserting that it has jurisdiction over the groundwater under the Reservation pursuant to the state water rights code, Utah Code Ann. § 73.1-1, State Petition at 139. Not only is the State's reliance on this provision misplaced,[51] the State's assertion flies in the face of Utah's Enabling Act, which

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[51] The State's attempted reliance on Utah Code Ann. § 73-1-1 to assert jurisdiction over discharges into all ground water within the State, including groundwater under the Skull Valley Reservation, lacks merit. That provision provides that "[a]ll waters in this state, whether above or under the ground, are hereby declared to be the property of the public, subject to all existing rights to the use thereof." On its face, this provision does not address the regulatory scope of the State's ground water discharge program or whether the State has jurisdiction over water quality on an Indian reservation. Rather, it constitutes a simple declaration that waters of the state (which do not include waters regulated or owned by the Tribe) are public property.

conditioned Utah's very statehood on its disclaimer of authority over or interest in Indian reservations. Specifically, the Enabling Act required the people of the proposed state to "forever disclaim all right and title . . . to all lands . . . owned or held by any Indian or Indian tribes; and that until the title thereto shall have been extinguished by the United States, the same shall be and remain subject to the disposition of the United States, and said Indian lands shall remain under the absolute jurisdiction and control of the Congress of the United States." 28 Stat. 107, 108 (Jul. 16, 1894) (emphasis added); see also, Utah Const. art. III.

Finally, even assuming the State has jurisdiction over discharges to ground water from Indian reservations, PFS is not required to obtain a ground water discharge permit from the State. The applicable regulations require a ground water discharge permit for any facility "which discharges or would probably result in a discharge of pollutants that may move directly or indirectly into ground water, including, but not limited to land application of wastes, waste storage pits, waste storage piles, landfills and dumps . . . ." Utah Admin. Code R317-6-6.1A. However, certain listed facilities are permitted by general rule (*i.e.,* are exempted from the requirement to obtain an individual permit) and are not required to obtain an individual ground water discharge permit. Such exempted facilities include flood control systems including detention basins, catch basins and wetland treatment facilities used for collecting or conveying storm water runoff, and above-ground storage tanks. Utah Admin. Code R317-6-6.2

The storage casks and canisters have been designed so that the spent nuclear fuel rods are totally encapsulated with no potential for a release of radioactive material or

other contaminants into the environment, including ground water. Thus, a ground water discharge permit is not required for the storage casks and canisters because they do not constitute a facility "which discharges or would probably result in a discharge of pollutants that may directly or indirectly move into ground water." Utah Admin. Code R317-6-6.1A.

In sum, PFS's application is not required to address the requirements to obtain a ground water discharge permit given the inapplicability of that permit program.

h) Other Water Permits

The State also claims that the Applicant's analysis of water permits required outside the Skull Valley Reservation with respect to the transportation corridor lacks specificity and does not satisfy the requirements of 10 C.F.R § 51.45. According to the State:

> In sections 9.1.3 and 9.2 of the ER, the Applicant merely states that it "might" need a Clear [sic] Water Act Section 404 dredge and fill permit for wetlands along the Skull Valley transportation corridor and that it will be required to consult with the State on the effects of the intermodal transfer site on the neighboring Timpie Springs Wildlife Management Area. . . . The Applicant must describe with specificity the wetlands affected by its operations, the point discharge sources and the activities that may require control under a storm water permit.

State Petition at 140.

This contention must be dismissed for lack of an adequate basis. The State has failed to allege that any specific wetlands will or could be affected by the construction

and operation of the ISFSI. Nor has the State indicated how such wetlands could be affected. Moreover, the State has failed to identify any point sources at the proposed facility from which discharges could emanate and what those discharges would likely consist of. Finally, no facts are provided to support the allegation that there will be any activities requiring a storm water permit.

i) Authority to Drill Wells

The State also claims that the Applicant must show legal authority to drill wells on the proposed ISFSI site and that its water appropriations will not interfere with or impair existing water rights. This contention must be dismissed for a lack of an adequate basis. The State cites no legal authority to the effect that Applicant lacks the right to drill wells on the proposed site. Nor does the State point to any specific existing water rights which the Applicant's appropriations are likely to impair or interfere. Finally, assuming, *arguendo*, the existence of such pre-existing rights, the State fails to describe how Applicant's activities would likely interfere with them. In short, the State fails to assert any legal or factual bases to support its contention. The contention must therefore be dismissed.

Moreover, the source of Applicant's authority to drill and use water wells within the exterior boundaries of the Skull Valley Reservation, without interference or regulation by the State, flows from Skull Valley Band's inherent sovereignty over its property

interests discussed above[52]; together with (I) the Band's reserved rights to groundwater under the Reservation and the absence of State control of such rights; (ii) the authority provided by Congress in the Indian Leasing Act (25 U.S.C. § 415) for Indian tribes to lease their property; and (iii) the lease granted to Applicant by the Tribe (Ex. 15 to State Petition).

(i) Reserved Rights and Absence of State Control

The Band's reserved right to water under the Reservation is an attribute of well established federal law. The Skull Valley Reservation was established by executive orders of September 7, 1917, and February 15, 1918 (IV Kappler, Indian Affairs, Laws and Treaties 1049). At the time the Reservation was established, the doctrine of federal reserved water rights operated to reserve from that time forward unappropriated sources of water appurtenant to the Reservation in an amount necessary to fulfill the purpose of the Reservation. Thus, the Tribe's reserved water right vested at the point in time at which the reservation was established. The federal government holds title in trust for the benefit of the Tribe. It cannot be lost by nonuse. Colville Confederated Tribes v. Walton, 460 F. Supp. 1320, 1326 (E.D. Wash. 1978), aff'd in part and rev'd in part, 647 F.2d 42 (9th Cir. 1981). The reserved rights doctrine is judicially created and does not depend on state law or procedure for its existence. The right was first expressed in Winters v. United States, 207 U.S. 564 (1908), and further developed in Arizona v. California, 373 U.S. 546 (1963), 376 U.S. 340 (1964) (decree), 439 U.S. 419 (1979)

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[52] See discussion, supra, in response to the State's contention regarding the alleged applicability of the State's ground water discharge program.

(supplemental decree), 460 U.S. 605 (1983) (omitted land and disputed boundary land claims), 466 U.S. 144 (1984) (second supplemental decree), Cappaert v. United States, 426 U.S. 128 (1976), and United States v. New Mexico, 438 U.S. 696 (1978). The reserved right is the source of water for the development and operation of the PFSF project.

In Opinion M-36164, September 10, 1953, "Applicability to Indian Lands in Arizona Law Regulating Withdrawal of Ground Water," II Op. Sol. on Indian Affairs 1618 (U.S.D.I. 1979), the Solicitor concluded that state ground water laws were not enforceable against Indian lands because the "application of State laws to Indians on Indian reservations is excluded unless Congress has specifically made them applicable, and this general proposition has been applied to Indian water rights, which have been held to be reserved exclusively for the benefit of Indians. [citations omitted]." The Solicitor further concluded that the Secretary is without power to make an agreement even with the consent of the Indians to make state laws applicable to tribal water resources because 25 U.S.C. § 177 "prohibits any alienation of Indian 'lands,' and lands commonly include the appurtenant water rights." See also "Water Rights--Uintah and Ouray Reservation--Interest of United States" (Nov. 14, 1960) II Op. Sol. On Indian Affairs 1892, 1893.

Thus, the Band has a reserved right to unreserved ground to water dating from the establishment of the Skull Valley Reservation. The State has ignored these facts and provides no alternative basis. Thus, its contention must be dismissed.

(ii) Indian Leasing Act

Among other things, the Indian Leasing Act authorizes Indian tribes to lease lands for "business purposes, including the development or utilization of natural resources in connection with operations under such leases . . . ." "Water Rights in Case of Non-Agricultural Lease--Colorado River Reservation" II Sol. Op. On Indian Affairs 1930, 1931 (Feb. 1, 1964). The Solicitor of Interior has concluded that "Indian land and water may bring larger returns or benefits to their owners if used for commercial or industrial purposes than if cultivated for crops. Where circumstances warrant the use of Indian lands for recreational, commercial, or industrial purposes rather than for agriculture, we believe that the reserved water rights remain available for these other purposes." Id. This view was confirmed by the Supreme Court in Arizona v. California, 439 U.S. 419, 422 (1979) (supplemental decree), in which the Court stated that the determination of the Indian reserved water right based on the water consumption requirements for irrigated agriculture "shall not constitute a restriction on the usage of them to irrigation or other agricultural application."

Thus, Band may, under the Indian Leasing Act, make its reserved waters available for commercial or industrial uses. Again, the State has ignored these facts and provides no alternative view to support its contention. Accordingly, it must be dismissed.

(iii) PFS Lease

In section 1(E) of its lease with PFS (Ex. 15 to State Petition) , the Tribe expressly grants PFS the right "to drill water wells on the Leased Premises to provide sufficient water capacity and quality necessary for the day-to-day operation of the Facility. Title to

the water will remain in the Band." Section 1(E) of the lease also states that the development and use of water will be "subject to the Band's environmental regulations that govern the quality of the Reservation's existing water supply, including reservoir water and water from wells drilled by the Band or third parties on the Reservation."

Accordingly, the lease evidences the legal authority of PFS to drill wells on the site. Thus, in view of the presumption that state regulatory authority is inapplicable to reservation lands as discussed *supra*, the State--not the Tribe or PFS--has the burden of establishing that (1) there are permit holders under state law whose permits predate the priority of the reservation's water right; and (2) that those permits will be interfered with unreasonably by the water development to be undertaken pursuant to the lease. Since as discussed above the State has provided absolutely no facts to support its claim of interference with other water rights, the State has not met this burden. Accordingly, this contention must be dismissed for lack of basis.

U. Utah Contention U: Impacts of Onsite Storage not Considered

1. The Contention

The State alleges in Contention U that:

> Contrary to the requirements of NEPA and 10 C.F.R. 51.45(c), the Applicant fails to give adequate consideration to reasonably foreseeable potential adverse environmental impacts during storage of spent fuel on the ISFSI site.

See State Petition at 142. The specific aspects which the State asserts that PFS has failed to adequately consider are set forth at pages 142 to 143 of the State's Petition. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes

that the contention be restated incorporating the specific allegation raised in its bases as follows:

> Contrary to the requirements of NEPA and 10 C.F.R. 51.45(c), the Applicant fails to give adequate consideration to reasonably foreseeable potential adverse environmental impacts during storage of spent fuel on the ISFSI site in that:
>
> a) The Applicant's Environmental Report fails to consider the impacts of overheating of casks due to the facility's inadequate thermal design, as alleged in Utah Contention H.
>
> b) The Applicant's Environmental Report fails to consider the safety risks and cost to inspect and repair the contents of spent fuel canisters, or for detecting and removing contamination on the canisters, as alleged in Utah Contention J, including risks to workers handling or inspecting casks with contaminated or defective contents during cask receipt, storage, preparation for shipment to a repository, and during site decommissioning.
>
> c) The Applicant's Environmental Report fails to consider the risks posed by blockage of the cooling vents on the storage casks. The Applicant must assess the consequences of an inadvertent blockage of the cooling ducts by animals, plants, or snow and ice, because it is reasonable to anticipate that cleaning the ducts will be delayed or overlooked, or that evacuation or fire will make it impossible to perform.
>
> d) The Applicant's Environmental Report fails to consider the risks of a sabotage event in which one or more storage casks is or are breached.

2. <u>Applicant's Response to the Contention</u>

The State raises several issues under its Contention U. We address in turn below each of the specific allegations raised by the State in Contention U as set forth above.

a) Impacts of Overheating Casks not Considered in Environmental Report.

As set forth above, the State contends that the Applicant's Environmental Report fails to consider the impacts of overheating of casks due to the facility's inadequate thermal design, as alleged in Utah Contention H.[53]

At the outset this contention must be rejected for vagueness and lack of specifity. The contention fails to specify what impacts should be considered, or that there are any. The contention is unclear whether it is raising issues of environmental consequences of an accident caused by overheating, or thermal impacts, or what. Thus, the applicant has no idea on what issues it must defend, and the contention must be rejected.

Without acknowledging applicant's position set out in the pertinent portions of the license application, the State makes the bold conclusory allegation that the Applicant's Environmental Report "fails to consider the impacts of overheating casks." See State Petition at 142. Applicant's license Application, however, does address the impacts of overheating casks.

The Applicant's Environmental Report expressly addresses the environmental effects of off-normal overheating of the storage casks in Section 5.1. That section discusses the environmental impacts of off-normal events and potential or postulated accidents in the SAR, including sustained temperatures in excess of the maximum ambient temperatures expected for the site, referred to as "off-normal ambient

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[53] To the extent that this contention simply restates the State's Contention H, see the Applicant's response to Utah Contention H.

temperatures." ER at 5.1-1. The analysis of the "off-normal ambient temperatures" event in the Environmental Report determines that "the canister retains its pressure boundary integrity in . . . the event[], and there is no release to the environmental of radioactive fission products or activation products from inside the canister," and "the concrete storage casks protecting the canister would remain intact, with no loss of shielding capability, so there are no abnormal radiation levels associated with [this] off-normal event[]." Id. at 5.1-1 to 2.

This impact analysis in the ER is based on the SAR, which specifically analyzes as an off-normal event the impacts on storage casks from "abnormally high ambient temperatures of sufficient duration for the storage systems to reach steady-state conditions." See Safety Analysis Report at 8.1-7. The analysis assumes a continuous ambient temperature of 100°F with solar insulation for a period or 4 to 5 days, which bounds the maximum average daily temperature of 93.2 °F for all cities in Utah. Id. The analysis determined that there are "no consequences" for the overheating of storage casks event, the resulting elevated temperatures are "all within the vendor temperature limits, the resultant "canister and storage cask temperatures pose no threat of fuel cladding failure, canister breach, or reduction in shielding provided by the storage cask," and "no corrective actions are required." Id. at 8.1-7 to 8. Thus, the analysis of this event in the License Application demonstrates there are no consequences from this event, including no release of radioactive materials to the environment and no offsite dose consequences.

In short, the State is simply mistaken in its claiming that the Applicant's Environmental Report "fails to consider the impacts of overheating of casks." See State

Petition at 142, and must be dismissed for failure to show that a genuine dispute exists with the applicant. See Section II.C.2 supra. To the extent the State believes some greater or different overheating event needs to be considered, it has failed to provide an adequate basis and to support such bases with expert opinion or documented backup.

b) Safety Risks and Cost to Inspect and Repair Contents of Canisters, or Detect and Remove Contamination on Canisters are not Considered in Environmental Report.

The State contends that the Applicant's Environmental Report fails to consider the safety risks and cost to inspect and repair the contents of spent fuel canisters, or for detecting and removing contamination on the canisters. See State Petition at 142. In particular, the State contends that the Environmental Report must include the safety risks and costs to workers handling and inspecting casks with contaminated or defective contents. See id.

The second facet of this contention, namely that the Applicant must consider safety risks and cost to inspect and repair the contents of spent fuel canisters must be rejected as an impermissible collateral attack on the Commission's regulations. See 10 C.F.R. § 2.758. As is shown in the Applicant's Response to Utah Contention J, the Commission's regulations do not require the Applicant to perform inspection and repair of the contents inside a seal-welded canister. Because the Commission's regulations do not require the inspection and repair of the contents of seal-welded storage canisters, the Applicant's Environmental Report is not required to analyze the impacts of an activity that is not required and the Applicant does not intend to perform at the facility.

The State's contention that the Applicant's Environmental Report has not considered the safety risks and costs of detecting and removing contamination on storage canisters, including the safety risks and costs to workers handling and inspecting casks, should be dismissed for two reasons.

First, to the extent the State contends that the Applicant has not considered the safety risks and costs of a postulated release of surface contamination from a storage canister, the State's contention is mistaken and should be rejected for not showing that a genuine dispute exists with the applicant. The Applicant's Environmental Report expressed addresses this event in Section 5.1 of its evaluation of off-normal contamination releases, which include the postulated release of surface contamination from the canister exterior. It identifies all of the impacts from the event, and concludes that "[t]he radiological impacts to the environment from normal operations at the PFSF (including off-normal conditions) are negligible." Environmental Report at 5.1-2. In summarizing the impacts of accidents on the surrounding population, the Environmental Report concludes that "[d]oses from the off-normal contamination release event discussed in Section 5.1.1 were below 0.1 mrem at the OCA fence and would be negligible at the greater distance to the nearest residence." Id. at 5.1-5.

Further, the Safety Analysis Report also specifically analyzes as an off-normal event the "postulated release of surface contamination from the exterior of the canister to the environment." See Safety Analysis Report at 8.1-16 to 18. The analysis concludes that "an individual . . .located within the plume 500 meters from the release point for the duration of the release . . . would receive a CEDE [committed effective dose equivalent]

of 4.4 E-3 [0.0044] mrem and a CDE [committed dose equivalent] to the lungs of 2.6 E-2 [0.026] mrem." Id. at 8.1-18. The analysis also concludes that "[o]nsite personnel located 150 meters from the release point would receive a CEDE of 0.03 mrem and a CDE to the lungs of 0.2 mrem." Id.

Thus, the Applicant's Environmental Report clearly addresses the "safety risks and costs . . . [of] contamination on the canisters." The State's contention should be rejected for not showing that a genuine dispute exists with the Applicant, and for mistakenly claiming that the Applicant did not address a relevant issue.

Furthermore, the impact on occupational workers posed by handling casks with off-normal surface contamination is addressed. See SAR at 7.1-7 to 8.

> Assuming the outer surfaces of a canister have removable Co-60 contamination at the maximum levels permitted by Section 10.2.2.1 [the technical specification on canister surface cantamination[, and all of this is postulated to be released into the Canister Transfer Building atmosphere, general area radionuclide concentrations in the Canister Transfer Building would not exceed 10 CFR 20 Appendix B, Table 1, allowable airborne concentrations for occupational workers.

Id. (emphasis added). The State's contention neither adresses, nor challenges the validity of this evaluation. The State's contention must be rejected for failing to state an adequate basis for an admissible contention. See 10 C.F.R. §§ 2.714(b), 2.758.

c) Risks Posed by Blockage of Cask Cooling Vents not Considered in Environmental Report.

As set forth above, the State contends that the Applicant's Environmental Report fails to consider the risks posed by blockage of the cooling vents on the storage casks. The State contends that the Applicant "must assess the consequences of an inadvertent blockage of the cooling ducts by animal or plant infestation, or by snow and ice during winter" because "[i]t is reasonable to anticipate that the cleaning of ducts will be delayed or overlooked, or that an evacuation or fire will make it impossible to perform this function." State Petition at 143. Again as with the claimed failure to consider overheating of the casks discussed in subpart a above, this contention fails to specify the alleged impact that Applicant has failed to analyze. Is it thermal impacts to the environment, or an accident release of radioactivity, or some other release? Therefore, as subpart a, this subcontention must dismissed for being impermissibly vague. Further, like subpart a above State's contention ignores the Applicant's consideration of this specific issue in the License Application and must accordingly be dismissed for mistakenly claiming that a relevant issue was unaddressed.

The Applicant's Environmental Report discussed the environmental effects of both the "Partial blockage of storage cask air inlet ducts" and the "100% blockage of air inlet ducts." See Environmental Report at 5.1-1, 5.1-3. The analysis of the partial blockage of storage cask air inlet ducts event in the Environmental Report determines that "the canister retains its pressure boundary integrity in . . . the event[], and there is no release to the environmental of radioactive fission products or activation products from inside the canister," and "the concrete storage casks protecting the canister would remain intact, with no loss of shielding capability, so there are no abnormal radiation levels

associated with [this] off-normal event[]." Id. at 5.1-1 to 2. The analysis of the 100% blockage of storage cask air inlet ducts event in the Environmental Report determines that "the canister would retain its confinement integrity" for this event and "the canister would remain inside the storage cask, so that shielding would continue to be provided." Id. at 5.1-3. Therefore, in both the partial and 100% air inlet duct blockage events, the analysis shows there is no release of radioactive materials to the environment and no offsite dose consequences.

As in subpart a, the analysis of impacts in the Environmental Report is based on the safety analysis in the SAR which addresses both the "Partial Blockage of Storage Cask Air Inlet Ducts," and the "100% Blockage of Air Inlet Ducts." See Safety Analysis Report at 8.1-9 to 10 and at 8.2-44 to 46.[54] The "Partial Blockage of Storage Cask Air Inlet Ducts" is evaluated as an off-normal event that could be caused by blockage from "heavy snow," "debris or other foreign material." Id. at 8.1-9, 10. Analysis of this event shows that the resulting maximum steady-state temperatures are all within the vendor's cask temperature limits. Id. at 8.1-10. Accordingly, no adverse environmental consequences result from partial blockage of the air vent ducts.

The "100% Blockage of Air Inlet Ducts" is evaluated as an accident event that is assumed for analysis to be caused by blockage of "all air inlet ducts" from "blowing debris, snow, rodents, or other material," including "a large sheet of plastic or a

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[54] The SAR assumes partial and 100% blockage of the air inlet ducts even though duct blockages are readily detected by a continuous remote storage cask temperature monitoring system as well as through routine surveillances of the cask inlet and outlet ducts. Id. at 8.1-9.

tarpaulin," as well as "a flood in which the height of the water exceeded the tops of the air inlet ducts." Id. at 8.2-44. The analysis assumes the duct blockages are not detected for approximately four days, even though the continuous remote storage cask temperature monitoring system is installed and monitored and routine casks surveillance's are done, and analyzes the temperature that the casks would reach is all of the air inlet ducts were completely blocked for four or five days. Id. at 8.2-45. The analysis determines that the canister would maintain its confinement integrity, and there would be no releases of radioactivity. Therefore, no offsite doses would result from this accident. Id. at 8.2-46.

In short, the State's contention that the Applicant's Environmental Report "fails to consider the risks posed by a blockage of the cooling vents on the storage cask" is simply mistaken. The State's contention should therefore be rejected and for not showing that a genuine dispute exists with the applicant, as required by 10 C.F.R. § 2.714(b)(2)(iii). See Section II.C.2. supra. Further, because it completely ignores the indepth analysis set forth in the license application, it fails to provide any factual basis why this analysis is deficient as would be required under 10 C.F.R. § 2.714(b)(2)(ii) had it addressed the analysis in the license application.

d) Risks of Sabotage Event in Which Casks are Breached not Considered in Environmental Report.

As set forth above, the State contends that the Applicant's Environmental Report fails to consider the risks of a sabotage event in which one or more storage casks is or are breached. The State relies on basis 3(b) of Utah Contention V, which addresses sabotage during spent fuel transportation, to allege that sabotage is a credible cause of a serious

accident. The State contends that because sabotage is a credible cause of a serious accident, sabotage should be considered in the Environmental Report and Environmental Impact Statement. The State's contention must be dismissed, however, because the Commission has established that the Environmental Report for a facility need not include the environmental effects from the risk of sabotage. Philadelphia Electric Company (Limerick Generating Station, Units 1 and 2), ALAB-819, 22 NRC 681, 697, 701 (1985). The risk of sabotage is not yet amenable to the degree of quantification that could be meaningfully used in the environmental impact decisionmaking process. Id. at 701. The State's contention that sabotage "should be considered in the Environmental Report and Environmental Impact Statement" must therefore be rejected.

V. Utah Contention V: Inadequate Consideration of Transportation-Related Radiological Environmental Impacts

1. The Contention

The State alleges in Contention V that:

> The Environmental Report ("ER") fails to give adequate consideration to the transportation-related environmental impacts of the proposed ISFSI.

State Petition at 144. The asserted bases for the contention are set forth at pages 144 to 161 of the State's Supplemental Petition. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated incorporating the specific allegations raised in its bases as follows:

> The Environmental Report ("ER") fails to give adequate consideration to the transportation-related environmental impacts of the proposed ISFSI in that:

a) In order to comply with NEPA, PFS and the NRC Staff must evaluate all of the environmental impacts, not just regional impacts, associated with transportation of spent fuel to and from the proposed ISFSI, including preparation of spent fuel for transportation to the ISFSI, spent fuel transfers during transportation to the ISFSI, transferring and returning defective casks to the originating nuclear power plant, and transfers and transportation required for the ultimate disposal of the spent fuel.

b) PFS's reliance on Table S-4 is inappropriate and inadequate. 10 C.F.R. § 51.52 applies only to light-water-cooled nuclear power plant construction permit applicants, not to offsite ISFSI applicants. Even if 10 C.F.R. § 51.52 applied, PFS does not satisfy the threshold conditions for using Table S-4, and its reliance on NUREG-1437 is misplaced. Since the conditions specified in 10 C.F.R. § 51.52(a) for use of Table S-4 are not satisfied, the PFS must provide "a full description and detailed analysis of the environmental effects of transportation of fuel and wastes to and from the reactor" in accordance with 10 C.F.R. § 51.52(b).

c) The SAR is inadequate to supplement Table S-4 in that:

(i) The Applicant fails to adequately address the intermodal transfer point in that the analysis utilizes unreasonable assumptions regarding rail shipment volume and its associated effects.

(ii) The Applicant fails to caluclate impacts of the return of substandard or degraded casks to the originating nuclear power plant licensees, including additional radiation doses to workers and the public.

(iii) The Applicant fails to address the environmental imapcts of any necessary intermodal transfer required at some of the originating nuclear power plants due to lack of rail access or inadequate crane capability.

d) New information shows that Table S-4 grossly underestimates transportation impacts. WASH-1238, which is the basis for Table S-4, uses poor and outdated data, and hence the Applicant's reliance on WASH-

1238 and Table S-4 is inadequate to demonstrate compliance with NEPA in that:

(i) WASH-1238 does not quantify the risks of spent fuel transportation. 10 C.F.R. § 51.45(c) requires that, to the extent practicable, the cost and benefits of a proposal should be quantified.

(ii) WASH-1238 does not address accidents caused by human error or sabotage;

(iii) WASH-1238 does not include up-to-date analyses of maximum credible accidents;

(iv) WASH-1238 does not address the potential for degradation of fuel cladding caused by dry fuel storage;

(v) WASH-1238 does not address the greater release fraction from severe accident consequences demonstrated in recent analyses;

(vi) WASH-1238 does not address specific regional characteristics of impacts on the environment from transportation and therefore is inadequate to satisfy 10 C.F.R. § 72.108;

(vii) WASH-1238 does not address circumstances and consequences of a criticality event of a representative rail transportation cask with a large capacity (capacity greater than a critical mass of fuel);

(viii) WASH-1238 does not contain information from the more recent and more accurate dose modeling RADTRAN computer program,

(ix) WASH-1238 does not address a representative transportation distance for the shipment of spent fuel from the originating nuclear power plants. WASH-1238 assumes an approximate distance of 1000 miles. The PFS acknowledges that the distance may be more than twice that amount. ER at 4.7-3.

2. Applicant's Response to the Contention

The State asserts that the Applicant's Environmental Report fails to give adequate consideration to the transportation-related environmental impacts of the proposed ISFSI, identifying a number of asserted concerns. State Petition at 144. The State's concerns raised under Contention V are addressed in turn below.

a) Evaluate All Environmental Impacts Associated with Transportation, Not Just Regional Impacts

The State claims that the Environmental Report fails to give adequate consideration to the transportation-related impacts in that "in order to comply with NEPA, PFS and the NRC Staff must evaluate all of the environmental impacts associated with transportation of spent fuel to and from the proposed ISFSI, including preparation of spent fuel for transportation to the ISFSI, transportation of spent fuel to the ISFSI, spent fuel transfers during transportation to the ISFSI, transferring and returning defective casks to the originating nuclear power plant, and transfers and transportation required for the ultimate disposal of the spent fuel." State Petition at 144 (emphasis added). Further, the State notes that 10 C.F.R. § 72.108 requires the Applicant to evaluate the impacts of transportation within the "region" of the ISFSI, but asserts that compliance with NEPA requires an evaluation of all, not just regional, environmental impacts of spent fuel transportation to and from the PFSF. Id. The State's assertion is a direct challenge to the NRC's generic determination in promulgating 10 C.F.R. Part 72 and, as such, is barred as a matter of law from being litigated in this licensing proceeding. See 10 C.F.R. § 2.758(a).

The regulation requiring the Applicant to develop an environmental report states that:

> [e]ach application for an ISFSI or MRS license under this part must be accompanied by an Environmental Report which meets the requirements of Subpart A of Part 51 of this chapter.

10 C.F.R. § 72.34. In promulgating 10 C.F.R. Part 72, the Commission directly considered the extent to which the environmental impacts associated with the transportation of spent fuel were to be considered in an Environmental Report for an ISFSI. The statement of consideration for that final rule reflects that:

> [t]he content of the environmental report required by § [72.34[55]] was the subject of a number of comments. The environmental report required for an ISFSI is an evaluation of the environmental impact of the ISFSI <u>on the region in which it is located, including the transportation that is involved</u>. Discussions of generic issues covered by DOE and NRC generic environmental impact statements may be incorporated by reference.

45 Fed. Reg. 74,693, 74,695 (November 12, 1980) ("Licensing Requirements for the Storage of Spent Fuel in an Independent Spent Fuel Storage Installation") (emphasis added). Further, the statement of consideration goes on to specifically address transportation considerations. It notes that:

> [a] number of comments considered that the transportation involved in spent fuel shipments to an ISFSI could be an important consideration in an evaluation of site suitability. This might be particularly true of a large installation.

<u>Id.</u> at 74,698.

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[55] In the August 19, 1988 rulemaking (53 Fed. Reg. at 31,651), 10 C.F.R. § 72.20 was renumbered to 10 C.F.R. § 72.34.

The Commission agreed that transportation was "an important consideration in the evaluation of site suitability," and added a new regulation to "specifically address this point." Id. The rule, as it stands, states that:

> The proposed ISFSI or MRS must be evaluated with respect to the potential impact on the environment of the transportation of spent fuel or high-level radioactive waste within the region.

10 C.F.R. § 72.108 (emphasis added).

Thus, the Commission has expressly considered in promulgating 10 C.F.R. Part 72 the extent to which the environmental impacts of transporting spent fuel to and from an ISFSI are to be considered, and it has determined by rule that the transportation environmental impacts to be assessed are those "within the region" where the ISFSI will be located. Id.; see also 45 Fed. Reg. at 74,695. Both 10 C.F.R. § 2.758(a) and the case precedent discussed in Section III above bar litigating in this licensing proceeding direct challenges to this generic determination established by the 10 C.F.R. Part 72 rulemaking. As a result, the State's contention and its related bases, which argue that "PFS and the NRC Staff must evaluate all of the environmental impacts associated with transportation of spent fuel to and from the proposed ISFSI," (State Petition at 144) are barred as a matter of law from being litigated in this licensing proceeding. See 10 C.F.R. § 2.758(a).

b) Reliance on Table S-4 Is Inappropriate and Inadequate

The State claims that Environmental Report fails to give adequate consideration to the transportation-related impacts in that "PFS's reliance on Table S-4 is inappropriate and inadequate." State Petition at 144, 145. The State notes that "[10 C.F.R.] § 51.52

applies only to [light-water-cooled] nuclear power plant construction permit applicants," not to offsite ISFSI applicants. Id. Further, the State claims that even if 10 C.F.R. § 51.52 applied, PFS does not satisfy the threshold conditions for using Table S-4, and PFS's reliance on NUREG-1437[56] is misplaced. Id. at 146. Additionally, the State claims that since the conditions specified in 10 C.F.R. § 51.52(a) for use of Table S-4 are not satisfied, the "PFS must provide 'a full description and detailed analysis of the environmental effects of transportation of fuel and wastes to and from the reactor'." Id. at 148-149 (citing 10 C.F.R. § 51.52(b)). The State's assertion is beyond the scope of this proceeding and is a direct challenge to the NRC's generic determination in promulgating 10 C.F.R. Part 72 and, as such, is barred as a matter of law from being litigated in this licensing proceeding. See 10 C.F.R. § 2.758(a).

The Commission's generic evaluation of the environmental impacts of transportation of spent fuel in 10 C.F.R. § 51.52 is equally applicable regardless of destination. See Duke Power Company, et al. (Catawba Nuclear Station, Units 1 and 2), ALAB-825, 22 NRC 785, 793 (1985), aff'd, Carolina Power and Light Company and North Carolina Eastern Municipal Power Agency, (Shearon Harris Nuclear Power Plant), ALAB-837, 23 NRC 525, 544 (1986). In order to have any useful purpose, application of Table S-4 cannot be limited to the construction permit phase of a reactor. See Shipments of Fuel from Long Island Power Authority's Shoreham Nuclear Power Station to Philadelphia Electric Company's Limerick Generating Station, DD-93-22, 38 NRC 365,

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[56] NUREG-1437, Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants (May 1996).

377 (1993). The analysis supporting Table S-4 considers the transportation environmental effects that would be expected over the operating life of a reactor. Id. (citing WASH-1238 at 3). Contrary to the State's claim that "[n]othing in Section 51.52 permits an applicant for an ISFSI [license] to invoke the numerical values in Table S-4" (State Petition at 145 (emphasis added)) nothing in 10 C.F.R. § 51.52 prohibits an applicant for an ISFSI license from choosing to use the data.

The Applicant's use of Table S-4 is consistent with the NRC's generic evaluation of the environmental impacts of spent fuel transportation in their promulgation of 10 C.F.R. Part 72. The "Generic Environmental Impact Statement on Handling and Storage of Spent Light Water Reactor Fuel," NUREG-0575, utilizes the information and data in WASH-1238, "Environmental Survey of Transportation of Radioactive Materials To and From Nuclear Power Plants," (and hence Table S-4 from 10 C.F.R. § 51.52) in assessing the environmental impacts of spent fuel transportation for an away-from-reactor ISFSI. See NUREG-0575 at 3-21, 4-22; see also, 45 Fed. Reg. at 74,698 (1980). Additionally, in promulgating 10 C.F.R. Part 72, the Commission directly considered the ability of an ISFSI applicant in its Environmental Report to utilize information and data from NRC generic environmental impact statements. The statement of consideration for that final rule reflects that:

> [t]he content of the environmental report required by § [72.34[57]] was the subject of a number of comments. The environmental report required for an ISFSI is an evaluation of the environmental impact of the ISFSI on the region in

[57] In the August 19, 1988 rulemaking (53 Fed. Reg. at 31,651), 10 C.F.R. § 72.20 was renumbered to 10 C.F.R. § 72.34.

> which it is located, including the transportation that is involved. Discussions of generic issues covered by DOE and NRC generic environmental impact statements may be incorporated by reference.

45 Fed. Reg. at 74,695 (1980) (emphasis added). Hence, the Applicant's use of Table S-4 is permitted, and this contention must be dismissed as a direct challenge to the NRC's generic determination in promulgating 10 C.F.R. Part 72 and, as such, is barred as a matter of law from being litigated in this licensing proceeding. See 10 C.F.R. § 2.758(a).

The Applicant is relying on Table S-4, a subpart of 10 C.F.R. §51.52, as a matter of choice, not as a matter of law. Table S-4, supplemented with information from NUREG-1437 and NUREG-0170, is relied upon as the best available data and information to assess environmental impacts of spent fuel transportation that is approved by the Commission for use in a licensing proceeding. As noted above, the Commission, in promulgating 10 C.F.R. Part 72, directly provided an ISFSI applicant in its Environmental Report with the ability to utilize information and data from NRC generic environmental impact statements. See 45 Fed. Reg. at 74,695 (1980). Hence the PFS's use of data and information from NUREG-1437 and NUREG-0170 is permitted to assess environmental impacts of spent fuel transportation. This contention, to the extent that it challenges the Applicant's ability to incorporate information covered by NUREG-1437 and NUREG-0170 must be dismissed as a direct challenge to the NRC's determination that "generic issues covered by . . . NRC generic environmental impact statements may be incorporated" in an ISFSI applicant's Environmental Report (45 Fed. Reg. at 74,695 (1980)) and, as such, is barred as a matter of law from being litigated in this licensing proceeding. See 10 C.F.R. § 2.758(a).

The State claims that even if 10 C.F.R. § 51.52 applied, "PFS has failed to show that the threshold conditions specified in 10 CFR § 51.52(a)(1)-(6) are met." State Petition at 146. The State asserts that such threshold conditions not satisfied are the average fuel irradiation, the fuel enrichment, the weight of transportation casks, and the traffic density. Id. at 146-149. The State also claims that Applicant's reliance on NUREG-1437 to supplement Table S-4 is misplaced. Id. 10 C.F.R. § 51.52(a)(1) through (5) delineate the specific conditions that must be met to use Table S-4.

NUREG-1437 demonstrates that environmental impacts of transporting spent fuel with higher burnup, which is coupled with increased fuel enrichments,[58] do not exceed those impacts identified in Table S-4, and hence "no revision to [Table S-4] would be required as a result of fuel burnup up to 60,000 MWd/MTU." NUREG-1437 at 6-25 (emphasis added). NUREG-1437 specifically states that:

> burnup level of fuel up to 60,000 MWd/MTU will not result in environmental impacts that are greater than the values currently in Tables S-3 and S-4, and, in many instances, are less (for example, see Table S.1 on p. viii of NUREG/CR-5009). Thus no revision to these tables would be required as a result of extended fuel burnup up to 60,000 MWd/MTU. Experience in handling fuel with burnups over 55,000 MWd/MTU and up to 5.5 percent ^{235}U enrichment has not revealed any unresolved safety concerns.

Id. (citing NUREG/CR-5009 p. 1-7). The limiting fuel characteristics for the spent fuel to be stored at the PFSF, see LA App. A at TS-3 through TS-5, are less than the 60,000 MWd/MTU burnup and the 5.5 percent ^{235}U enrichment specified by the NUREG. Id.

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[58] Fuel enrichment is required to increase in order to achieve higher burnup of the fuel. See NUREG-1437 at 6-24.

To the extent that the State challenges these findings in NUREG-1437 (see State Petition at 146-147), the State's contention is a direct challenge to the NRC's generic determination made in promulgating 10 C.F.R. Part 72 and, as such, is barred as a matter of law from being litigated in this licensing proceeding. See 10 C.F.R. § 2.758(a).

The State's claim that since the conditions specified in 10 C.F.R. § 51.52(a) for use of Table S-4 are not satisfied, the "PFS must provide 'a full description and detailed analysis of the environmental effects of transportation of fuel and wastes to and from the reactor'" (State Petition at 148-149, citing 10 C.F.R. § 51.52(b)), is an impermissible attack on the Commission's rules and must be rejected. In any event, 10 C.F.R. § 51.52(b) is inapplicable since it only requires the "full description and detailed analysis" in the case of "reactors not meeting the conditions of paragraph (a) of [10 C.F.R. 51.52]. See 10 C.F.R. § 51.52(b) (emphasis added). The State's contention, to the extent that it seeks to invoke 10 C.F.R. § 51.52(b) on the Applicant, "advocate[s] stricter requirements than those imposed by the regulations," and thus, this contention must be dismissed as an is an impermissible attack on the Commission's rules.

c) SAR is Inadequate to Supplement Table S-4

The State claims that the Environmental Report fails to give adequate consideration to the transportation-related impacts in that the SAR is inadequate to supplement Table S-4. State Petition at 144, 149. The State claims that the Applicant fails to adequately address the intermodal transfer point in that the analysis utilizes unreasonable assumptions regarding rail shipment volume and its associated effects. Id. The State also claims that the Applicant fails to calculate impacts of the "return of

substandard or degraded casks to the originating nuclear power plant licensees," including additional radiation doses to workers and the public. Id. at 150. Further, the State claims that Applicant fails to address the environmental impacts of any necessary intermodal transfer required at some of the originating nuclear power plants due to lack of rail access or inadequate crane capability. Id. The State's assertion is beyond the scope of this proceeding, lacks specificity, and is a direct challenge to the NRC regulations and, as such, is barred as a matter of law from being litigated in this licensing proceeding.

The State claims that the SAR contains analysis for the intermodal transfer point that is inadequate in that it utilizes unreasonable assumptions regarding rail shipment volume and its associated affects. State Petition at 149. Contrary to the State's assertion, since the Applicant utilizes Table S-4 to calculate the environmental impacts of spent fuel transportation, the Applicant does consider the environmental impacts of intermodal transfer. WASH-1238, and hence Table S-4, considers that intermodal transfer, and hence rail-to-heavy haul truck shipments, may be necessary for radioactive material shipments and addresses the environmental impacts of that transfer. See WASH-1238 at 38, 41 (discussing the option of "intermediate trucking by special equipment to the nearest railroad" and the exposure to carrier personnel or the general public, specifically mentioning "transshipment, e.g., when the cask is transported by truck from the reactor to a nearby railhead and transferred from the truck to a railroad car").

The Applicant provides further response related to the shipment volume at the intermodal transfer facility with Utah Contention B, which addresses the same topic. See Applicant's Response to Utah Contention B.

The State also claims that the Applicant fails to calculate impacts of the return of substandard or degraded casks to the originating nuclear power plant licensees, including additional radiation doses to workers and the public. State Petition at 150. The SAR makes no mention of returning "substandard or degraded" shipping casks to the originating nuclear power plant licensee, as asserted by the State.

Prior to any shipment, a shipment (shipping cask and its contents) is required to comply with applicable DOT and NRC regulations. The shipping cask is a 10 C.F.R. Part 71 certified package that is required to be designed to ensure containment of any radioactive material, including any external surface contamination on a canister, and prevent release of the material to the environment. See 10 C.F.R. § 71.43; see also SAR at 5.1-8. A challenge to the capability of a shipping cask to perform its designed and certified function is a challenge to NRC regulation. Additionally, a contention premised on the proposition that a licensee will violate regulatory requirements, such as releasing a shipment that does not comply with the regulations, must be rejected. The State has not attempted to make any such showing here. Therefore, the contention must be dismissed as inadequate to establish a material factual dispute that warrants further inquiry. Id.

The State claims that the Applicant does not consider the foreseeable risk posed by a cask drop accident in which a canister is dented or warped and cannot be returned to its shipping cask. State Petition at 150. The Applicant has evaluated credible off-normal handling events. The SAR states that "[l]oad drops by the overhead bridge crane, the semi-gantry crane, or the canister downloader are not considered credible because of the single-failure-proof design of these lifting systems." SAR at 8.1-11. However, the

Applicant postulates several events involving off-normal handling, all caused by human error, to determine the effect on the canister. Id. The resulting analyses demonstrate that the stresses from the postulated events are below the code allowable limits and that the canister vessel and its internals maintain their structural integrity and continue to perform their safety function. Id. at 8.1-12 through 8.1-14. The State's contention ignores relevant material submitted by the Applicant.

The State claims that the Environmental Report fails to give adequate consideration to the transportation-related impacts in that Applicant fails to address the environmental impacts of any necessary intermodal transfer required at some of the originating nuclear power plants due to lack of rail access or inadequate crane capability. State Petition at 144, 150. The State notes that some nuclear power plants do not have rail access or sufficient crane capability to handle heavy shipping casks, and that the Applicant fails to state how these transportation casks will be shipped to the ISFSI or describe the associated impacts. Id. at 150-151. The State's assertion is beyond the scope of this proceeding, and is a direct challenge to NRC regulations.

As stated in subpart (a) of this contention, the Commission has expressly considered in promulgating 10 C.F.R. Part 72 the extent to which the environmental impacts of the ISFSI are to be considered in an Environmental Report for an ISFSI. The statement of consideration for that final rule reflects that:

> [t]he content of the environmental report required by § [72.34[59]] was the subject of a number of comments. The

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[59] In the August 19, 1988 rulemaking (53 Fed. Reg. at 31,651), 10 C.F.R. § 72.20 was renumbered to 10 C.F.R. § 72.34.

> environmental report required for an ISFSI is an evaluation of the environmental impact of the ISFSI on the region in which it is located, including the transportation that is involved. Discussions of generic issues covered by DOE and NRC generic environmental impact statements may be incorporated by reference.

45 Fed. Reg. at 74,695 (1980). The State's contention to require that the Applicant address the impacts at an originating nuclear power plant, which is outside "the region in which [the ISFSI] is located" (id. (emphasis added.)), must be dismissed as an impermissible attack on the Commission's rules.

Moreover, this contention is beyond the scope of this licensing proceeding, which is "for a materials license, under the provisions of 10 CFR part 72." See 62 Fed. Reg. at 41,099 (1997). The concern raised by the State has been addressed in the initial 10 C.F.R. Part 50 licensing proceeding for each of the originating nuclear power plants. Since the State's contention is raising an issue unrelated to the granting or denying of the 10 C.F.R. Part 72 materials license, it must be rejected as being beyond the scope of this proceeding.

d) New Information Shows that Table S-4 Grossly Underestimates Transportation Impacts

The State claims that Environmental Report fails to give adequate consideration to the transportation-related impacts in that new information shows that Table S-4 grossly underestimates transportation impacts. State Petition at 144, 151. Further, the State claims that WASH-1238, which is the basis for Table S-4, uses poor and outdated data, and hence the Applicant's reliance on WASH-1238 and Table S-4 is inadequate to demonstrate compliance with NEPA. Id. The State has raised a host of concerns and

alleged inadequacies with WASH-1238, which is the basis for Table S-4 in 10 C.F.R. § 51.52. The proper forum for addressing these concerns and alleged inadequacies is to file a petition for rulemaking with the Commission, not this licensing proceeding, in accordance with 10 C.F.R. § 2.802. See 10 C.F.R. § 2.758. Since the State is challenging the validity of Table S-4 in 10 C.F.R. § 51.52 and its basis WASH-1238, this contention is barred as a matter of law from being litigated in this licensing proceeding. Id.

The State also notes that "NRC regulations at 10 CFR § 51.45(c) require that, to the extent practicable, the costs and benefits of a proposal should be quantified. WASH-1238 [which is the basis for Table S-4] makes no attempt to quantify the risks of spent fuel transportation but merely asserts that they are low." State Petition at 151. Since the State asserts that new data and information are available on accident risks and transportation conditions, the State claims that "[t]he NRC must prepare a new EIS that takes into account current information, and quantify the risks posed by spent fuel transportation." Id. As provided in the Applicant's response to part (a) of this contention, the State's assertion for preparation of a new EIS is a direct challenge to the NRC regulations and, as such, is barred as a matter of law from being litigated in this licensing proceeding. See 10 C.F.R. § 2.758(a). Again, the proper forum for addressing this concern is to file a petition for rulemaking with the Commission, not this licensing proceeding, in accordance with 10 C.F.R. § 2.802. Id.

Finally, the inadequacies alleged by the State with respect to WASH-1238 in many instances plainly lack sufficient basis. For example, one of the State's concerns is

that "WASH-1238 makes no attempt to quantify the risks of spent fuel transportation, but merely asserts that they are low." See State Petition at 151. 10 C.F.R. § 51.45(c) requires that, to the extent practicable, the cost and benefits of a proposal should be quantified. Id. 10 C.F.R. 51.52(a)(6) states that "... the values in the table [Table S-4] represent the contribution of the transportation to the environmental costs ..." and footnote 4 to Table S-4 states that "... the environmental risk of radiological effects stemming from transportation accidents is currently incapable of being numerically quantified ..." Those factors that cannot reasonably be quantified should be considered in qualitative terms. Kerr-McGee Chemical Corporation (West Chicago Rare Earths Facility) LBP-84-42, 20 NRC 1296, 1329-1330 (1984 citing, Statement of Consideration for 10 C.F.R. § 51, 49 Fed. Reg. 9363 (March 12, 1984). Table S-4 presents the environmental risks, to the extent practicable. Thus, this contention must be dismissed as having no basis.

Another one of the State's concerns is that WASH-1238 "does not include accidents caused by human error or sabotage." See State Petition at 152. However, contrary to the State's assertion, WASH-1238 does address human error. WASH-1238 states that:

> [i]t is possible that a package will be constructed or used in a manner not in accordance with the design; however, the likelihood of such errors is considered small in view of the regulatory requirements for quality assurance and for various observations and tests before each shipment.

WASH-1238 at 16, 72. WASH-1238 and Table S-4 adequately evaluate the probability and consequences of a shipping accident, including those that might be caused by error in preparing a cask for shipment. Virginia Electric and Power Company, (North Anna

Power Station, Units 1 and 2), LBP-85-34, 22 NRC 481, 488 (1986). Thus, this contention must be dismissed as having no basis.

Further, with respect to sabotage, environmental impact statements need not discuss, however, the environmental effects of alternatives which are "deemed only remote and speculative possibilities." Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, 435 U.S. 519, 551 (1978); Philadelphia Electric Company (Limerick Generating Station, Units 1 and 2), ALAB-819, 22 NRC 681, 697, 701 (1985). Additionally, the environmental report for a facility need not include the environmental effects from the risk of sabotage. Limerick, supra at 681, 697, 701 (1985). The risk of sabotage is not yet amenable to the degree of quantification that could be meaningfully used in the environmental impact decisionmaking process. Id. at 701. Thus, this contention must be dismissed as having no basis and beyond the scope of NEPA.

Another of the State's concerns is that "WASH-1238 does not include up-to-date analyses of maximum credible accidents." As previously stated, environmental impact statements need not discuss, however, the environmental effects of alternatives which are "deemed only remote and speculative possibilities." Vermont Yankee, supra at 551 (1978); Limerick, supra at 696-97, n.12, 700 (1985). Thus, this contention must be dismissed as having no basis.

The State also expresses concern that WASH-1238 does not address circumstances and consequences of a criticality event of a representative rail transportation cask with a large capacity. State Petition at 159. Transportation cask licensing is addressed under 10 C.F.R. Part 71 - - which specifically addresses packaging

design to prevent a criticality incident. Thus, this contention must be dismissed as being beyond the scope of this 10 C.F.R. Part 72 materials license proceeding.

Another of the State's concerns is that WASH-1238 does not address a representative transportation distance for the shipment of spent fuel from the originating nuclear power plants. State Supp. Petition at 160. WASH-1238 assumes an approximate distance of 1000 miles. The State claims that the distance may be more than twice that amount. Id. (citing ER at 4.7-3). WASH-1238 states that "[e]ach shipment will travel a distance of about 1000 miles on average, (a minimum distance of 25 miles to a maximum of 3,000 miles)." WASH-1238 at 23. NUREG-0575 (the GEIS for Part 72) addresses environmental risk for travel of 2,000 miles. The estimated average transport distance is 1,000 miles. "However, if the offsite storage facility required an additional 1,000 miles of travel, the probability of occurrence of this accident would increase to 8×10^{-11}. Consequently, the environmental risk due to offsite transportation accidents involving spent fuel casks remains extremely small." NUREG-0575 at 4-24. Thus, this contention must be dismissed as having no basis.

W. Utah Contention W: Other Impacts Not Considered.

1. The Contention

The State alleges in Contention W that:

> The Environmental Report does not adequately consider the adverse impacts of the proposed ISFSI and thus does not comply with NEPA or 10 C.F.R. § 51.45(b).

See State Petition at 162. The asserted bases for the contention are set forth in three pages of discussion following the contention. In order to focus the analysis on whether

the contention should be admitted, the Applicant proposes that the contention be restated as follows, incorporating the specific allegations raised in its bases:

> The Environmental Report does not adequately consider the adverse impacts of the proposed ISFSI and thus does not comply with NEPA or 10 C.F.R. § 51.45(b) in that:
>
> a) The Applicant has not discussed the cumulative impacts of this facility in relationship to hazardous and industrial facilities/activities located in the region of the ISFSI site and the intermodal transfer point.
>
> b) The Applicant has not evaluated the potential for accidents from the heavy haul trucks that could make up to 400 trips per year along the Skull Valley Road, a secondary two-way paved road.
>
> c) The Applicant has not considered the impact of flooding on its facility or the intermodal transfer point.
>
> d) The Applicant has not adequately discussed the degradation of air quality and water resources due to construction, operation, and maintenance of the ISFSI.
>
> e) The Applicant has not fully assessed the environmental impact of placing 4,000 casks over a site with such complex seismicity, capable of faults and potentially unstable soils.
>
> f) The Applicant has not adequately considered the cost of the visual impact of the proposed ISFSI and of the transportation of spent fuel by heavy haul trucks along Skull Valley Road on the public's use and enjoyment of the area.

2. Applicant's Response to the Contention

The State raises a number of issues under Contention W, which we address in turn below.

a) Cumulative Impacts

The State asserts that the Applicant has not discussed the cumulative impacts of this facility in relationship to hazardous and industrial facilities/activities located in the region of the ISFSI site and the intermodal transfer point. State Petition at 162. The State alleges that

> an accident involving spent fuel casks may cause facilities such as the Army's chemical weapons incinerator (TOCDF) to be evacuated. Conversely, an accident at TOCDF may cause evacuation of the ISFSI or the intermodal transfer site. In any event, the cumulative impact of this facility in relationship to other facilities has not been considered.

Id. The State also incorporates by reference its bases from Contention K ("Inadequate consideration of credible accidents"). Id.

This subcontention must be dismissed because it makes allegations without providing concise statements of alleged facts or expert opinion, supported by specific sources and documents to establish the facts or expert opinion, that are sufficient to sustain the subcontention's allegations. Specifically concerning contentions that an application is deficient regarding its analysis of allegedly cumulative environmental effects, the petitioner must specify the effects and must come forward with specific facts and reasons to show that such effects will occur. See Duquesne Light Company (Beaver Valley Power Station, Unit 2), LBP-84-6, 19 NRC 393, 425 (1984). In particular, the Petitioner must come forward with specific information regarding the incremental effects of the proposed action and must show why the applicant's analysis of the pre-existing effects with which the effects of the proposed action will supposedly be cumulative is wrong. Georgia Power Company (Vogtle Generating Plant, Units 1 and 2), LBP-84-35,

20 NRC 887, 914 (1984); Toledo Edison Company (Davis-Besse Nuclear Power Station, Unit 1), LBP-87-11, 25 NRC 287, 293 (1987); Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 247 (1993) (petitioners must also come forward with data regarding pre-existing effects).

Furthermore, the NRC has strict standards a petitioner must meet to have a contention premised on accident scenarios admitted:

> [W]hen a postulated accident scenario provides the premise for a contention, a causative mechanism for the accident must be described and some credible basis for it must be provided. If a contention claims that an EIS is necessary or inadequate in some respect, the "rule of reason" by which NEPA is to be interpreted provides that agencies need not consider "remote and speculative risks" or "events whose probabilities they believe to be inconsequentially small." In addition, the Supreme Court has . . . held that . . . NEPA [does not] require a "worst case analysis."

Vermont Yankee Nuclear Power Corporation (Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29, 44 (1989), vacated in part on other grounds and remanded, CLI-90-4, 31 NRC 333 (1990) (citing, e.g., Limerick Ecology Action, Inc. v. NRC, 869 F.2d 719, 739 (3d Cir. 1989); see also Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 333-34 (1989)). Without a "causative accident scenario" and a "credible basis," a postulated accident is "a matter of conjecture, beyond the rule of reason," and thus cannot be considered to be "reasonably foreseeable." Hence, such an accident is not cognizable under NEPA. Vermont Yankee, ALAB-919, 30 NRC at 51 n.30.

This subcontention must be dismissed because the State has come forward with insufficient data and has not provided reasons to show that cumulative environmental effects will occur; moreover its accident scenarios do not have credible bases and thus

they are remote and speculative risks. See State Petition at 73-78, 162. The State describes various activities that take place at facilities in Tooele County (in Contention K) and speculates about possible accidents those activities might cause, but it provides no data regarding the likelihood of any of those activities or accidents having an impact on the environment. See id. Thus there is no reason to believe that any of the accident scenarios the State postulates are credible. See Vermont Yankee, ALAB-919, 30 NRC at 51 n.30. Moreover, the State provides no data whatsoever concerning the incremental environmental effects of the ISFSI. See State Petition at 73-78, 162. And beyond claiming (wrongly) that the Applicant has not addressed cumulative environmental impacts, the State does not provide any reasons to question the Applicant's assessment. Id. Therefore, because the State has not come forward with reasons to show that the environmental effects of other facilities in Tooele County would be cumulative with those of the ISFSI (i.e., the State has not shown that the accident scenarios it postulates are credible), because it has not provided any data on the allegedly incremental effects of the ISFSI, and because it has not shown why the Applicant's assessment of cumulative impacts is wrong, this subcontention must be dismissed. See Vermont Yankee, ALAB-919, 30 NRC at 44; Beaver Valley, LBP-84-6, 19 NRC at 425; Davis-Besse, LBP-87-11, 25 NRC. at 293; Rancho Seco, LBP-93-23, 38 NRC at 247; Vogtle, LBP-84-35, 20 NRC at 914.

This subcontention must also be dismissed because it ignores relevant material submitted by the Applicant. The Environmental Report addresses the cumulative environmental impact of the ISFSI and other sources where they are relevant. See, e.g.,

ER §§ 4.1.7, 4.2.7. For example, the Environmental Report addresses the cumulative impact of truck and other vehicular traffic on Skull Valley Road in terms of air pollution, impediments to traffic flow, and noise. Id. §§ 4.1.3, 4.1.7, 4.2.3, 4.2.7. It estimates the cumulative radiological and non-radiological impact on various offsite personnel of loading, sealing and transporting spent fuel canisters and casks. Id. § 4.7. Moreover, the Applicant has considered the potential impact of other facilities in Tooele County on the ISFSI and has found that it is unlikely that they would have any. See SAR § 2.2. For example, the Applicant has considered the effects of operations at the Tekoi Rocket Engine Test Facility, Dugway Proving Ground, and Tooele Army Depot, the industrial, transportation, or military facilities closest to the site, and has found that they would pose no threat to the ISFSI because of the distance to them and the presence of intervening terrain. SAR at 2.2-1 to 4. Therefore, because the State has ignored this material, this subcontention must be dismissed. See Section II.C.2. supra.

b) Risk of Accidents along the Transportation Corridor

The State claims that "the potential for accidents from these [heavy haul] vehicles has not been evaluated" in the Environmental Report. State Petition at 162. The State notes that "[h]eavy haul trucks could make up to 400 trips per year along Skull Valley Road, a secondary two-way paved road." Id.

This subcontention should be dismissed as lacking sufficient information "to show that a genuine dispute exists with the applicant on a material issue of law or fact." 10 C.F.R. § 2.714(b)(2)(iii). The Applicant has addressed the environmental impacts from accidents associated with transportation of spent fuel related to the PFSF, including

intermodal transfer to heavy haul truck. See ER § 5.2; see also Calculation Package Vol. II, Tab 21, "PFSF Transportation Impacts," SWEC Calc. No. 05996.01-P-001 at 4.[60] In calculating the number of shipments and traffic density, "[a]ll shipments of spent fuel to and from the PFSF will be by rail, with use of heavy haul trailers between the PFSF and the intermodal transfer point and as necessary between the originating reactor and the nearest railhead." Id. Further, as addressed in Applicant's response to Utah Contention V, Table S-4 in 10 C.F.R. § 51.52 and WASH-1238 incorporate the environmental effects of dual mode transportation and intermodal transfer. See Applicant's Response to Utah Contention V at subpart b. The State ignores Applicant's treatment of the potential for vehicle accidents and provides no basis for challenging Applicant's analysis. Thus there is no reason to believe that a genuine dispute exists with the Applicant on a material issue of law or fact and this subcontention must be dismissed.

c) Flooding

This subcontention too must be dismissed because it does not include sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. If the State believes that flooding has an impact on the facility or intermodal transfer point, it must provide facts or expert opinion to show why. Florida Power and Light Company (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-90-16, 31 NRC 509, 521 (1990). The State has provided no support for its implication that flooding

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[60] The Calculation Packages are on the docket in the proceeding and have been physically provided to the State at its request. See, e.g. letter to Denise Chancellor (State of Utah) from John L. Donned (Stone & Webster) dated September 19, 1997; letter to Mark Delligatti (NRC) from J.L. Donnell (Stone & Webster) dated July 28, 1997; letter to Mark Delligatti (NRC) from John D. Parkyn (PFS), dated July 14, 1997.

can have any adverse impact on the facility and/or intermodal transfer point. The regulations only require that conflicts be discussed in proportion to their significance. See 10 C.F.R. § 51.45(b)(1). Because the State has not shown that the impact of flooding is a material issue of fact, this subcontention must be dismissed.

This subcontention must also be dismissed because it ignores relevant material submitted by the Applicant. The State asserts that the Applicant has not considered the impact of flooding on its facility or the intermodal transfer point. As discussed in detail in the ER, the PSFS location has not experienced any flooding in the past since it is not located within a flood plain. (ER § 2.5.2). Nevertheless, a detailed analysis of probable maximum precipitation (PMP) was done to determine a probable maximum flood (PMF) for the PSFS and access road area, see SAR § 2.4.2. Based on this analysis, the Applicant concluded that (1) the PMF stormwater runoff from Watershed Basin #1 (Stansbury Mountain) will not cause flooding of the PFSF because the facility is not within the basin watershed and (2) the PMF stormwater runoff from Watershed Basin II (Hickman Knolls) will be diverted from the facility by a newly constructed earthen berm. See ER § 2.5.2, SAR § 2.4.2.3. In summary, the Applicant concluded that the PFSF is considered to be flood dry and all structures, systems and components which are classified as important to safety are not subject to flooding. Id. Because the State has ignored this material, this subcontention must be dismissed.

Finally, the portion of this subcontention dealing with the intermodal transfer point must be dismissed because the transportation of spent fuel is outside the scope of this hearing. As discussed in section III-B. above, contentions are not cognizable unless

they are material to a matter that falls within the scope of the proceeding for which the licensing board has been delegated jurisdiction as set forth in the Commission's Notice of Opportunity for Hearing. The Notice of Opportunity for Hearing in this case involves 10 C.F.R. part 72. The transportation of spent fuel is governed by part 71 and other provisions, but not part 72. See, generally, 10 C.F.R. § 71.0. Thus, this portion of the subcontention must be rejected as beyond the scope of the hearing.

d) Air and Water Pollution

The State claims that the Applicant has not adequately discussed the degradation of air quality and water resources due to construction, operation, and maintenance of the ISFSI. State Petition at 163. The State incorporates by reference its bases from Contention T (Inadequacy of Required Permits and Other Entitlements) Basis 3 (Environmental Quality Standards and Requirements). Id.

(i) Air Pollution

As discussed in Applicant's response to State Contention T, subpart f, the Applicant did evaluate the air quality effects of the construction and operation of the proposed ISFSI and the construction of transportation corridors. ER §§ 4.1.3, 4.2.3, 4.3.3. The State in its contention completely ignores the air quality evaluation done by Applicant of the construction of the ISFSI, and in particular Tables 4.1-4 and 4.1-5 which show no significant impact on air quality and no need for permits under the Clean Air

Act. Therefore this contention, like that in Contention T must be dismissed for ignoring relevant information in the License Application and lack of basis. [61]

Moreover, the State has supplied no factual basis to support its assertion that the air emission sources located on the Skull Valley reservation will have a significant impact on State air resources because of the limited size of the reservation. See State Petition at 137-39. If the State asserts that the Applicant has inadequately portrayed the impact its facility will have on air quality, it must come forward and specify the actual magnitude of the impact the facility will have. See Duke Power Company (Catawba Nuclear Station, Units 1 and 2), LBP-82-16, 15 NRC 566, 588 (1982). The State has provided no facts or expert opinion to support its position of significant impact and its contention amounts to a bald, conclusory allegation, and thus it must be dismissed.

(ii) Water Pollution

The State claims that the Applicant's discussion of the degradation of water quality that will be caused by ISFSI-related activities is inadequate. State Petition at 163. The State also claims that the applicant's analysis concerning potential water permit requirements outside the Skull Valley Reservation with respect to the transportation corridor lacks specificity and does not satisfy the requirements of 10 C.F.R §51.45. According to the State:

> In sections 9.1.3 and 9.2 of the ER, the Applicant merely states that it "might" need a Clear [sic] Water Act Section 404 dredge and fill permit for wetlands along the Skull Valley transportation corridor, that it will be required to consult with the State on the effects of the intermodal

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[61] Applicant incorporates its response to Contention T, subpart f.

> transfer site on the neighboring Timpie Springs Wildlife Management Area. . . . The Applicant must describe with specificity the wetlands affected by its operations, the point discharge sources and the activities that may require control under a storm water permit.

State Petition at 140. Finally, the State claims that the Applicant must show that its water appropriations will not interfere with or impair existing water rights, and that Applicant has not adequately specified the rate at which it will consume water.

This contention must be dismissed for lack of an adequate basis. The State has failed to allege that any specific wetlands will or could be affected by the construction and operation of the ISFSI. See State Petition at 140. Nor has the State indicated how such wetlands could be affected. See id. If a petitioner asserts that an applicant's proposed facility will have an impact on the environment, it must specify the source of the impact, the nature of the materials emitted, the mechanism by which they might reach the area allegedly to be affected, and the alleged magnitude of the effect. See Catawba, LBP-82-16, 15 NRC at 566; Philadelphia Electric Company (Limerick Generating Station, Units 1 and 2), LBP-82-43A, 15 NRC 1423, 1481 (1982). Because the State has not come forward with this information, this subcontention must be dismissed.

Likewise, the State's claim regarding the impact of the ISFSI on water rights must also be dismissed for lack of an adequate basis. The State does not point to any specific existing water rights which the Applicant's appropriations are likely to impair or interfere with. See State Petition at 140-41. Assuming, arguendo, the existence of such pre-existing rights, the State fails to describe how Applicant's activities would likely interfere

with them. See id. In short, the State fails to assert any legal or factual bases to support its contention, so it must therefore be dismissed.

Finally, this subcontention must be dismissed because it ignores relevant material submitted by the Applicant. Regarding the Applicant's water consumption estimate, the Application states that the facility will consume 5,000 gallons per day during the first year of construction, 3,500 gallons per day during the second year, and 1,500 gallons per day thereafter. ER at 4.5-1. Because the State has ignored this relevant material, this subcontention must be dismissed.

e) Seismic Effects

See Applicant's response to Utah Contention L.

f) The Visual Impact of the ISFSI

The State claims that the Applicant has not adequately considered the "cost of the visual impact" of the proposed ISFSI and of the transportation of spent fuel by heavy haul trucks along Skull Valley Road on the public's use and enjoyment of the area. State Petition at 163.

This subcontention must be dismissed because it does not include "sufficient information . . . to show that a genuine dispute exists with the applicant on a material issue of law or fact." It does not provide the "supporting reasons for the petitioner's belief" that the application is inadequate. The State quotes material from the Applicant's Environmental Report but provides no facts, expert opinion, or documents of its own to show that the Applicant has failed to adequately consider any visual impact of the construction or operation of the ISFSI. State Petition at 163-64. The State also provides

no facts, expert opinion, or documents that provide reasons to believe that the Applicant omitted any visual impact of the facility from its assessment. Id. The State claims that the ISFSI will have an impact on "the public's use and enjoyment of the area," but provides no basis to support its claim. Id. at 163. Likewise, it does not support its claims that the ISFSI will detract from visitors' enjoyment of Desert Peak, the Deseret Wilderness Area, the Wasatch National Forest, and Horseshoe Springs. Id. at 164. Because the State has failed to provide any factual evidence or supporting reasons that tend to cast doubt on a specified portion of the application, or show that there is some specified omission, this subcontention must be dismissed.

This subcontention must also be dismissed like the other subparts of Contention W because it ignores relevant material submitted by the Applicant. See, e.g., Vogtle, LBP-91-21, 33 NRC 419, 424 (1991); Rancho Seco, LBP-93-23, 38 NRC 200, 247-48 (1993). The State asserts that the Applicant has not addressed the visual impact of the ISFSI and the transportation of spent fuel casks on the public's use and enjoyment of Deseret Park, the Deseret Wilderness Area, the Wasatch National Forest, and Horseshoe Springs. State Petition at 164. The Applicant has indeed addressed the visual impact on the use and enjoyment of the surrounding area, including regional parks and wilderness areas. ER at 2.7-10, 2.9-3 to 2.9-4, 4.1-19, 4.2-7 to 4.2-9. The ISFSI was specifically designed to minimize visual impact (its features are typical of other human settlements in Skull Valley); it is also remote (i.e., Deseret Peak Wilderness Area is six miles from the site) and partly obscured from view by the surrounding terrain (i.e.,

Hickman Knolls screens the site from view from the south). Id. at 4.2-7 to 4.2-8. Because the State ignores this material, this subcontention must be dismissed.

X. Utah Contention X: Need for the Facility

1. The Contention

The State alleges in Contention X that:

> The Applicant fails to demonstrate there is a need for the facility as is required under NEPA.

State Petition at 165. The asserted bases for the contention are set forth on pages 165-66. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows, incorporating the specific allegations in its bases:

> The Applicant fails to demonstrate there is a need for the facility as is required under NEPA, in that:
>
> a) Nuclear power plants can add on-site storage for spent fuel.
>
> b) The underlying premise of need for facility is economic benefit to participants, particularly those decommissioning their facilities, which is insufficient to justify need for the facility.
>
> c) Because the proposed ISFSI would store spent fuel nationally, PFS must detail and substantiate for each reactor site the quantity of spent fuel, projected storage capacity, cost of on-site storage, specific state imposed restrictions, and potential preemption of those restrictions by federal law.

2. Applicant's Response to the Contention

a) Addition to On-Site Spent Fuel Storage

The State claims that the premise underlying the Applicant's analysis of need for the plant -- that reactor sites are physically or economically unable to meet their anticipated spent fuel storage requirements -- is unsubstantiated. As support, the State points to a statement from Northern States Power home page and the Environmental Report itself which the State claims show that reactors are able to provide additional storage by reracking and by constructing on-site dry spent fuel storage. State Petition at 165.

The State has not supplied a basis for this contention, notwithstanding its citation to two documents. In each case, the document does not say what the State claims it does. As a result, the contention must be dismissed. See Section II.C.1 supra at 14.

The first document cited by the State is NSP Prairie Island Spent Fuel Storage Frequently Asked Questions ("FAQ"). The State alleges that this document says that Northern States Power, one of the PFS consortium members, "has enough room at its existing on-site storage facility for all the storage containers the plant will need." State Petition at 165. However, that document, although noting the physical capacity of the on-site ISFSI is physically large enough, pointed out that "the site's storage pool is full" and that the State legislature has only "authorized NSP to load and store up to 17 containers at the plant site as the company meets a number of requirements spelled out in the authorizing legislation. As noted in Applicant's earlier filings, the storage capability

currently permitted by State law at Prairie Island will allow operation of the plant only until about the year 2002.[62]

The second document cited by the State is the Applicant's Environmental Report. The State claims that the Environmental Report "acknowledges that most reactors have been able to add additional storage capacity by reracking and by constructing on site dry spent fuel storage." State Petition at 165, citing ER at 1.2-1. The State's paraphrase of the Environmental Report is misleading and, as actually written, does not support the contention. It actually says "[i]n the past, utilities have generally been able to provide adequate at-reactor storage for their spent fuel." ER at 1.2-1 (emphasis added). Moreover, this statement is qualified even further. The Environmental Report goes on to say that

> . . . some utilities are running out of options or are running the risk that those options will not be available to them. Some reactors have reached their maximum spent fuel pool capacity because of structural or other physical limitations. Some utilities are subject to state or local restrictions or regulatory processes that could restrict or prohibit storage expansions. In some cases, state legislation or state regulatory decisions have imposed very costly and burdensome restrictions or limitations on storage expansions, raising the risk that future expansions my [sic] be restricted, delayed, limited, or prohibited. The 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.

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[62] See Applicant's Answer to the State of Utah's Motion for an Extension of Time, October 6, 1997.

ER at 1.2-1 (emphasis added). The State provides no factual basis for contesting this statement.

Thus, the State misstates both the documents it relies on to support its contention that plants can add on-site storage for spent fuel and provides no other factual basis in either the contention itself or the referenced affidavit of Lawrence White to support a challenge to the statement and its conclusion. Where, as here "a contention is based on a factual underpinning in a document that has been essentially repudiated by the source of that document, the contention may be dismissed unless the intervenor offers another independent source"; Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), CLI-89-3, 29 NRC 234, 241 (1989). Accordingly, the State has supplied no factual basis as required by 10 C.F.R. § 2.714(b)(2)(ii) to support this sub-contention and it must be dismissed.

b) Economic Benefit to Participants

The State claims in this sub-contention that the "underlying premise [of need for the facility] is that the owners of nuclear reactors will be in a substantially superior economic position if they can ship their spent nuclear fuel half way across the country to a centralized storage facility in Utah," which the State claims "is insufficient to justify the need for the facility." State Petition at 165-66. The only support the State refers to is the Environmental Report at 1.2-1, 2, which discusses the economic benefits for reactors that have reached the end of their operating life of shipping spent fuel off-site, benefits that

include reduced decommissioning costs as well as possibly lower storage costs. State Petition at 165.

This subcontention, like the one above, is fatally flawed under the amended Rules of Practice. The contention and the referenced affidavit again provide no "statement of the facts" with reference "to those specific sources or documents" on which the State intends to rely "to establish those facts or expert opinion." The only supporting reference in either the contention or the affidavit is the Environmental Report. Again, however, the Environmental Report does not support the State's position.

First, the State completely ignores the other reasons set forth in the Environmental Report justifying the need for the proposed facility. Those reasons include prevention of premature shutdown of nuclear power plants and the concomitant loss of generating capacity due to state regulatory impediments and the physical limitations at many sites that would prevent continued on-site storage. Further, it ignores the additional benefit discussed in describing the "Need for the Facility" that "[t]he construction and operation of the PFSF may . . . substitute for building dozens of individual on-site ISFSIs throughout the country . . ." ER at 1.2-2. This is further elaborated upon at Section 8.1.3.1, "Selection of Candidate Sites," which discusses the consequences of building ISFSIs at reactor sites around the country as follows:

> [N]ot building the PFSF is likely to increase the number of ISFSIs built at reactor sites around the country, and increase the number of different storage technologies employed at these sites. The construction of additional on-site ISFSIs at plant sites will result in more sites disturbed and greater environmental impact than constructing one site in a remote, desert environment. In addition, lack of

> standardization will increase the complexity and cost of preparing and shipping spent fuel to a federal facility and increase the decommissioning burden for utilities with on-site ISFSIs.

ER at 8.1-3. Another benefit of the PFSF noted in discussing the Need for the Facility is that "[t]he canister-based transportable storage cask system to be used at the PFSF . . . will make subsequent transportation to a permanent repository or other location more efficient by use of a consistent packaging design and the use of the PFSF as a staging facility allowing for more efficient transportation . . ." ER at 1.2-2, 3.

Other than its bald conclusory allegation, the State provides no facts or supporting documents to take issue with this analysis of the need for the facility in the Environmental Report.[63] Therefore, this subcontention must be dismissed for lack of basis under 10 C.F.R. 2.714(b).

c) Reactor-by-Reactor Analysis of Need

The State also claims that because the ISFSI would store spent fuel nationally, PFS must detail and substantiate for each reactor site the quantity of spent fuel, projected storage capacity, cost of on-site storage, specific state imposed restrictions, and potential preemption of those restrictions by federal law. State Supp. Petition at 166. Like the previous two subcontentions, this one must also be dismissed for lack of basis.

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[63] The State's citation to Detroit Edison Company (Enrico Fermi Atomic Power Plant, Unit 2), LBP-78-11, 7 NRC 381 (1978) is inapposite. While it is true, as that decision holds, that the NEPA cost-benefit analysis considers "the costs and benefits to society in general from the proposed action," id. at 391, it does not support the State's view that benefits which flow to a particular group (in this case, electric utilities, their ratepayers and customers) are to be disregarded.

The State asserts, without providing any supporting factual or legal basis, that the Applicant must provide in its statement of need for the facility, a detailed analysis for each reactor site. NEPA, however, employs a rule of reason, and therefore requires, at most, a reasonable discussion of the need for the facility.

The State has provided absolutely no legal or factual basis to show that Applicant's analysis of need is inadequate or that the reactor-by-reactor analysis which it demands is consistent with NEPA's rule of reason on NRC regulators. Applicant provides a thorough discussion of the need for the facility at Section 1.2 of the Environmental Report. That section, as discussed above, describes the numerous benefits which the facility would create and the costs which it would avoid. The State has failed to provide any factual basis to support a challenge to these conclusions.

Further, nothing in NRC regulations or CEQ regulations even remotely suggest that the far-flung reaching analysis of need set forth by the State must be done in order to satisfy NEPA. NRC regulations for preparing a draft and final EIS do not even mention discussion of "need" for the licensed project. (See, e.g., 10 C.F.R. §§ 51.71, 51.75, 51.80, 51.91). Only NRC format guidelines address project "need" and, even there, merely state that the EIS "will briefly describe and specify the need for the proposed action." 10 C.F.R. Part 51, App. A § 4. According to regulations promulgated by the Council on Environmental Quality, established by NEPA to issue guidelines to assist federal agencies in complying with the Act, the "purpose and need" section of an EIS "shall briefly specify the underlying purpose and need . . ." 40 C.F.R. § 1502.13 (emphasis added).

The State has come forward with no facts to suggest under NEPA's rule of reason that this brief description of need envisioned by the applicable regulatory authorities must be expanded into its proposed grandiose analysis of every plant in the nation. Absent some supporting basis -- which is completely lacking in both the State's contention and the referenced affidavit -- one can only conclude that the State seeks "paralysis by analysis." The State has provided neither any legal or factual bases for such a state-by-state, plant-by-plant analysis as required by the Commission's amended rules of practice. Therefore, this subcontention must be dismissed, for lack as basis. Further, it should be dismissed "advocat[ing] stricter requirements than those imposed by the regulations," and therefore amounting to "an impermissible collateral attack on the Commission's rules." See Section II, B., supra at 5-7.

Y. Utah Contention Y: Connected Actions

1. The Contention

The State alleges in Contention Y that:

> The Applicant fails to adequately discuss the link between this proposal and the national high level waste program, a connected action, as is required under NEPA.

State Petition at 167. The asserted bases are set forth in two pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated incorporating the specific allegations in its bases as indicated below:

> The Applicant fails to adequately discuss the link between this proposal and the national high level waste program, a connected action, as is required under NEPA in that:

a) Applicant's proposal must be considered together with DOE's high level nuclear waste program to ensure consideration of cumulative effects under 40 C.F.R. § 1502.4;

b) Applicant's proposal will commit the Federal Government to one of many alternative courses of action for dealing with high level waste disposal and will also result in cumulative impacts;

c) Applicant's need to consider the implication of the Skull Valley site as a de facto permanent repository.

2. Applicant's Response to the Contention

The State raises a number of issues under Contention Y, which the Applicant addresses in turn below.

a) Connected Action

The State asserts that the Applicant's proposal must be considered together with DOE's high level nuclear waste program to ensure consideration of cumulative effects under 40 C.F.R. § 1502.4. State Petition at 167-68.

The ISFSI is not a "connected action" as defined in the guidelines of the Council on Environmental Quality ("CEQ"). The State alleges that the licensing of Applicant's proposal by the NRC and the DOE's high level waste program are "connected actions [that] need to be considered together to ensure that the cumulative effects of these actions are properly evaluated. 40 C.F.R. § 1502.4" State Petition at 167. There is neither legal nor factual basis for this claim.

The CEQ guidelines cited by the State, 40 C.F.R. § 1502.4, state that

> Proposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement.

The CEQ regulations then define "closely related" or "connected" actions, 40 C.F.R. § 1508.25(a)(1), as follows:

> Connected actions, which means that they are closely related and therefore should be discussed in the same impact statement. Actions are connected if they:
>
> (i) Automatically trigger other actions which may require environmental impact statements;
>
> (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously;
>
> (iii) Are independent parts of a larger action and depend on the larger action for their justification.

The Applicant's proposal is clearly outside the scope of any of these definitions. It does not "automatically trigger" any DOE actions. It can and will proceed regardless of DOE activities under the high level waste program, and it is not an interdependent part of the DOE waste program, nor is the proposal dependent on the waste program for its justification. The State has specified nothing to the contrary. See State Petition at 167-68.

The contention should therefore be dismissed. The State does not provide any alleged facts, expert opinion, or documents to support its claim that the Applicant's ISFSI and the DOE's high level waste program are linked or connected. See id. The State claims that the siting and construction of a DOE MRS was linked to the schedule for developing a high-level waste repository (citing House and Senate bills to authorize construction of an MRS in Nevada). However, it provides nothing to show that the

Applicant's ISFSI is in any way connected with either the MRS or the repository. See id. Therefore, this subcontention must be dismissed for lack of a factual basis.

Furthermore, the Fourth Circuit's recent holding that the planned temporary storage at DOE's Savannah River site of 409 spent nuclear fuel rods from foreign research reactors was not "connected," under 40 C.F.R. § 1508.25(a)(1), to DOE's plan to construct a facility to receive and store 24,000 fuel rods from those and other research reactors, (including the 409 to be temporarily stored at Savannah River) provides further support for the conclusion that Applicant's ISFSI is not connected to the DOE high-level waste program. See South Carolina v. O'Leary, 64 F.3d 892, 898-99 (4th Cir. 1995). In holding that the temporary storage was not connected to the larger facility, the Fourth Circuit emphasized that the larger facility did not yet exist and that DOE was already required to prepare an environmental impact statement for the larger facility. Id. at 898. Despite the fact that the 409 rods were ultimately to be stored at the larger facility (id. at 904), the acceptance of the 409 rods was held to be "independent and separable" from the storage of rods at the larger facility. Id. at 899. Therefore, despite the fact that the spent fuel at the Applicant's ISFSI will ultimately be stored at the DOE's waste repository, (like the 24,000-rod facility in O'Leary, the DOE repository does not yet exist), the DOE is committed to preparing an impact statement for the site (see 10 C.F.R. §§ 51.67, 60.21(a)). Thus, the Applicant's ISFSI should be deemed "independent and separable" from the DOE waste program and thus not a "connected action."

b) Commitment of the Government and Cumulative Impacts

The contention states that Applicant's proposal "will commit the government to one of many alternative courses of action for dealing with high level waste disposal in general" and "does nothing to advance the ultimate objective of safely disposing of radioactive waste." State Petition at 167-168. Unlike the prior subcontention, which argues that Applicant's proposal is "tightly linked" to DOE's proposal (State Petition at 167), this subcontention contradictorily argues that Applicant's proposal "does nothing to advance" the DOE's program. Id. at 168. The contention fails to specify which "one of many alternative courses of action" the Government will be committed to as a result of the Applicant's proposal or how that commitment might occur. Id. The contention is wholly non-specific and devoid of factual basis . Thus, the contention should be rejected.

The State further asserts that the proposed ISFSI "adds significant cumulative impacts caused by transporting spent fuel across the country to Utah and then moving the fuel to wherever a final repository will be located." State Petition at 168. However, this charge, too, is baseless. When a petitioner asserts that an application is deficient regarding its analysis of allegedly cumulative environmental effects, the petitioner must specify the effects and must provide factual basis for how such effects will occur. See Duquesne Light Company (Beaver Valley Power Station, Unit 2), LBP-84-8, 19 NRC 393, 425 (1984). In particular, it must provide specific information regarding the incremental effects of the proposed action. It must also evidence why the applicant's analysis of the pre-existing effects, with which the effects of the proposed action will supposedly be cumulative, is wrong. See Applicant's discussion in Response to Utah

V. CASTLE ROCK CONTENTIONS

Castle Rock has filed 24 contentions[64] to which the Applicant responds as set forth below.

A. Castle Rock Contention 1: Absence of NRC Authority

1. The Contention

Castle Rock alleges in Contention 1 that:

> The Application is defective because NRC does not have authority to license a large-scale, off-site facility for the long-term storage of spent nuclear fuel such as the proposed PFSF.

Castle Rock Petition at 2. The asserted bases for the contention are set forth in eight pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows, incorporating the specific allegations in its bases:

> The Application is defective because NRC does not have authority to license a large-scale, off-site facility for the long-term storage of spent nuclear fuel such as the proposed PFSF in that:
>
> a) The NWPA created a comprehensive program for spent nuclear fuel to be stored on the site of existing nuclear power plants and, to a limited extent, in DOE-initiated off-site storage facilities until such fuel is placed in a permanent repository.

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[64] See Contentions of Petitioners Castle Rock Land & Livestock, L.C., Skull Valley Co., Ltd, and Ensign Ranches of Utah, L.C. on the License Application for the Private Fuel Storage Facility (hereinafter "Castle Rock Petition"), dated November 21, 1997.

b) The NWPA expressly provides that it does not authorize the licensing of interim storage of spent nuclear fuel in private, off-site facilities.

c) The NRC may not use its discretionary power to act contrary to the manifest will of Congress.

d) The regulations in 10 C.F.R. Part 72 exceed the authority delegated to the NRC by Congress.

e) Licensing of an off-site, private spent fuel storage facility is inconsistent with both the language and purpose of the NWPA because such a facility must be sponsored by DOE and must be designed to minimize transportation of spent nuclear fuel.

2. Applicant's Response to the Contention

Castle Rock Contention 1 challenges the authority of the NRC to issue a license to Applicant under 10 C.F.R. Part 72 and thus impermissibly challenges a Commission rule. As discussed more definitively below, the Commission has the authority and has exercised it. In any case, it is not within the jurisdiction of this Board to entertain a challenge to that authority. A contention seeking that challenge is simply not appropriate for litigation in a licensing proceeding and must be summarily rejected.

In any event, the Commission's rules at 10 C.F.R. Part 72 set forth the requirements, procedures, and criteria for the issuance of licenses to receive, transfer and possess power reactor spent fuel and other radioactive materials associated with spent fuel storage in a private independent spent fuel storage installation ("ISFSI") or in a federal monitored retrievable storage facility ("MRS"). The NRC's authority to issue a license for an ISFSI, either at a reactor site or away from a reactor site, is found in the Atomic Energy Act of 1954, as amended. The specific sections of the Atomic Energy

Act which provide the statutory authority are set forth in the Authority paragraph at the beginning of Part 72. There can be no question that the Atomic Energy Act provides the statutory authority for Part 72. The regulatory scheme authorized by the Atomic Energy Act has been described by the U. S. Court of Appeals for the D. C. Circuit as "virtually unique in the degree to which broad responsibility is reposed in the administering agency, free of close prescription in its charter as to how it shall proceed in achieving the statutory objectives." Siegel v. AEC, 400 F.2d 778 (D.C. Cir. 1968). Castle Rock Contention 1 is a challenge to the NRC's exercise of its responsibility under the Atomic Energy Act and is therefore inadmissible as a contention.

Part 72 predates the Nuclear Waste Policy Act of 1982 ("NWPA"). See 45 Fed. Reg. 74,693 (Nov. 12, 1980). After the NWPA, Part 72 was amended to address the licensing of a federally-owned and operated MRS. See 43 Fed. Reg. 31651 (Aug. 19, 1986). However, while the NWPA did authorize the construction and operation of a federally-funded and operated MRS under certain conditions, the NWPA did not repeal the NRC's existing authority under the Atomic Energy Act to license interim storage of spent nuclear fuel away from reactors at non-federal sites. In fact, Commission had issued a license under Part 72 to a private, away-from-reactor ISFSI before the NWPA was enacted. See NRC Docket 72-1, Materials License No. SNM-2500, (General Electric Company, Morris Operation). Amendments 2 through 9 to this license were issued after the passage of the NWPA. See, e.g., Amendment No. 9 to License SNM-2500, dated

June 16, 1995 (Docket No. 72-1). The NRC would not have authority to issue amendments to a license if it had no authority to issue the license in the first instance.[65]

Castle Rock baldly states "the NWPA expressly provides that it does not authorize the licensing of interim storage of spent nuclear fuel in private, off-site facilities." Castle Rock Petition at 3. There is no such express provision in the NWPA and Castle Rock provides no citation for that proposition.[66] While it is correct that the NWPA does not specifically authorize the NRC to license ISFSIs, that fact is irrelevant. The authority for the NRC to license an ISFSI is the Atomic Energy Act not the NWPA. Nothing in the NWPA purports to repeal that authority. Castle Rock argues that the NRC's authority to license away-from-reactor ISFSIs was repealed by implication in the scheme established by the NWPA for a federal MRS and the encouragement of private at-reactor spent nuclear fuel storage. However, repeal of statutes by implication are strongly disfavored as a matter of law. See Morton v. Mancuri, 417 U.S. 535, 549 (1974). The NRC has not interpreted the NWPA as a repeal of its authority. Nor, for that matter, has DOE claimed that it has exclusive authority to build and operate an away-from-reactor

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[65] In issuing a license amendment, the Commission will be guided by the considerations that govern the issuance of initial licenses. 10 C.F.R. § 72.58. Obviously, the Commission has made a determination on eight occasions (Amendments 2 through 9 of Materials License SNM-2500) since the NWPA was enacted that it has the authority to issue a license under Part 72 to a non-federal away-from-reactor spent fuel storage facility.

[66] On a number of occasions Castle Rock cites to Section 135(h) of the NWPA (42 U.S.C. 10155(h)), a provision which does not address licensing of a spent fuel storage facility. See e.g., Castle Rock Petition at 7-9. Section 135(h) and other provisions cited by Castle Rock found in Subtitle B of the NWPA are now defunct. DOE's authority for interim storage pursuant to Section 135 expired on January 1, 1990, in the absence of any contracts entered into pursuant to Section 136(a). Indeed, the NRC has rescinded and removed from the Code of Federal Regulations its rule (10 C.F.R. Part 53) for determining whether owners or generators of spent fuel qualified for interim spent fuel storage under Section 135, because the statutory time frame for implementation of Sections 135 and 136 of the NWPA had expired. See 61 Fed. Reg. 35,935 (July 9, 1996).

spent fuel storage facility. There is no support for Castle Rock Contention 1 in the NWPA, in its legislative history, or in the subsequent interpretation of the NWPA by the agencies primarily charged with implementing it.[67]

Castle Rock Contention 1 must be rejected. It impermissibly challenges a Commission rule. In any event, the NWPA did not repeal the Commission's authority to license an ISFSI under Part 72.

B. Castle Rock Contention 2: Non-Compliance with Regulations

1. The Contention

Castle Rock alleges in Contention 2 that:

> PFS's Application is defective because it seeks a license for an ISFSI pursuant to 10 C.F.R. Part 72. However, the proposed storage installation is not an ISFSI and is otherwise not licensable under 10 C.F.R. Part 72.

Castle Rock Petition at 10. The asserted bases for the contention are set forth in five pages of discussion following the contention. Castle Rock Contention 2 is little more than a repackaging and further elaboration on Castle Rock Contention 1 (which was "incorporated" into the bases for Contention 2). Castle Rock Petition at 11. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes

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[67] In a case in which the U. S. Court of Appeals for the Ninth Circuit sought to determine the applicability of the NWPA to pre-existing storage agreements for spent fuel between DOE and a private party, the court held that "the interim storage provisions of the Nuclear Waste Policy Act are not comprehensive regulations governing all federal storage of nuclear waste, but remedial legislation addressed to a specific problem." Idaho v. U. S. Dep't of Energy, 945 F2d 295, 298-99 (9th Cir. 1991), cert. denied, 504 U.S. 956 (1992). The NWPA simply did not preempt the field with respect to private storage of spent nuclear fuel.

that the contention be restated as follows, incorporating the specific allegations in its bases:

> PFS's Application is defective because it seeks a license for an ISFSI pursuant to 10 C.F.R. Part 72. However, the proposed storage installation is not an ISFSI and is otherwise not licensable under 10 C.F.R. Part 72 in that:
>
> a) In order to harmonize the NRC regulations with the NWPA and Atomic Energy Act, the regulation defining ISFSI must be interpreted to exclude the proposed PFSF.
>
> b) NRC regulations must be construed to require PFS to demonstrate maximization of the use of existing storage capability at reactor sites.
>
> c) NRC regulations must be construed to require PFS to demonstrate that DOE has exhausted all means for providing off-site storage capacity.
>
> d) NRC regulations must be construed to require a showing that DOE has attempted to establish a cooperative program for on-site storage under 42 U.S.C. § 10198

2. Applicant's Response to the Contention

Castle Rock Contention 2 does not assert that the facility proposed by Applicant does not meet the definition of an ISFSI as set forth in 10 C.F.R. 72.3. Rather Castle Rock's challenge to the authority of the NRC to issue a license to Applicant under Part 72 is based on its erroneous interpretation of the NWPA, refuted in Applicant's Response to Castle Rock Contention 1. Once again, Castle Rock impermissibly challenges a Commission rule. Such a contention is not appropriate for litigation in a licensing proceeding and must be summarily rejected. See Section II.B supra.

Castle Rock argues that Applicant's facility cannot be licensed as an ISFSI because it would fail to "harmonize" the NRC's regulations with certain provisions of the NWPA. See Castle Rock Petition at 10-12 (First Basis). Castle Rock's citation to Emery Mining Corp. v. Secretary of Labor, 744 F.2d 1411 (10th Cir. 1984) for the proposition that "a regulation must be interpreted so as to harmonize with and further and not to conflict with the objective of the statute it implements" is correct, but irrelevant. The "statute it [i.e., Part 72] implements" is the Atomic Energy Act, not the NWPA. For the reasons set forth above in response to Castle Rock Contention 1, the NWPA does not preclude the NRC from licensing Applicant's ISFSI.

Castle Rock argues that the NWPA establishes preconditions for licensing an ISFSI. Again, Castle Rock's reliance on Subtitle B of the NWPA is misplaced. As discussed above, the interim storage provisions cited by Castle Rock found in Subtitle B of the NWPA are now defunct. By arguing that PFS must demonstrate "maximization of the use of existing storage capability at reactor sites" (Castle Rock Petition at 12), Castle Rock is attempting to graft onto the licensing of an ISFSI under Part 72, the now-rescinded criteria of former 10 C.F.R. Part 53. Again, this is an impermissible challenge to the NRC's regulations.

Similarly, Castle Rock's reference to Section 135(a)(5) of the NWPA (42 U.S.C. § 10155(a)(5)) and the argument that DOE must provide 1,900 MTU of away-from-reactor spent nuclear fuel storage as a precondition to licensing of an ISFSI under Part 72 are misplaced. See Castle Rock Petition at 13 (Third Basis). The statutory time frame for implementation of this provision by DOE has passed and the provision is no longer

operative. It was not then, and is not now, a precondition for licensing an ISFSI under Part 72.

Finally, the demonstration program for on-site storage established to implement Section 218 of the NWPA (42 U.S.C. § 10198) has nothing to do with the licensing of an ISFSI under Part 72. See Castle Rock Petition at 14 (Fourth Basis). While DOE did in fact carry out a demonstration program as required by Section 218,[68] that program is irrelevant to the Commission's Part 72 regulations.

Castle Rock Contention 2 must be rejected. It impermissibly challenges a Commission rule. In any event, the NWPA did not establish preconditions to the Commission's authority to license an ISFSI under Part 72.

C. Castle Rock Contention 3: Conflict with DOE Duties and Prerogatives

1. The Contention

Castle Rock alleges in Contention 3 that:

> The Application must be denied because the proposed PFSF interferes with DOE duties and prerogatives under the NWPA.

Castle Rock Petition at 15. The asserted bases for the contention are set forth in three pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows, incorporating the specific allegations in its bases:

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[68] See Office of Civilian Radioactive Waste Management, U. S. Department of Energy, "Annual Report to Congress," (August 1988), at 25, for a description of the demonstration program.

> The Application must be denied because the proposed PFSF interferes with DOE duties and prerogatives under the NWPA in that:
>
> a) The NWPA assigns exclusively to DOE the responsibility for establishing a permanent repository for spent nuclear fuel, for establishment of an interim storage program using new technologies to expand on-site storage of spent nuclear fuel, for providing for 1,900 MTU of capacity for storage of spent nuclear fuel, for establishing a Monitored Retrievable Storage facility ("MRS"), and for taking title to certain spent nuclear fuel on January 31, 1998.
>
> b) Applicant fails to show that on-site storage capacity has been optimized.
>
> c) Applicant discloses no intent on the part of PFS to transfer the spent nuclear fuel subject to the contracts with DOE when DOE is prepared to take possession and fails to describe a program for removing such spent nuclear fuel from the PFSF for transfer to DOE.

2. Applicant's Response to the Contention

Castle Rock Contention 3 simply restates the refrain in Castle Rock Contentions 1 and 2, that the authority of the NRC to issue a license to Applicant under Part 72 is inconsistent with the NWPA. Once again Castle Rock impermissibly challenges a Commission rule. Such a contention is not appropriate for litigation in a licensing proceeding and must be summarily rejected. See Section II.B supra.

For the reasons set forth in Applicant's responses to Castle Rock Contentions 1 and 2, the NWPA does not preclude the NRC from licensing Applicant's ISFSI. More specifically, DOE has already carried out a demonstration program as required by Section 218 of the NWPA, as discussed in Applicant's response to Castle Rock Contention 2. That program is irrelevant to the Commission's rules at Part 72. As discussed in

Applicant's responses to Castle Rock Contentions 1 and 2, the statutory time frame for implementation of the interim storage program described in Subtitle B of the NWPA has passed, and the provision is no longer operative. It was, in any event, not a precondition for licensing an ISFSI under Part 72. The licensing of the Applicant's PFSF will not in any way interfere with DOE's establishment of a permanent repository or of an MRS, or with DOE's obligation to begin to dispose of spent nuclear fuel by January 31, 1998. Rather, the availability of the PFSF will mitigate the damages which utilities will incur as a result of DOE's announced inability to begin taking delivery of spent nuclear fuel by January 31, 1998, and the delay in establishment of a permanent repository for a decade or more.[69]

Again, as noted in Applicant's responses to Castle Rock Contentions 1 and 2, there is no requirement that there be a showing that on-site spent nuclear fuel storage has been "optimized" as a precondition to licensing an ISFSI under Part 72.

Certainly, the licensing of the PFSF will not interfere with DOE's obligation to take title and possession of the spent nuclear fuel stored at the PFSF. The sealed canisters containing the spent nuclear fuel elements are designed to meet DOE guidance applicable to multi-purpose canisters. LA at App. B, 1-1. The need for the PFSF, as described in

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[69]In Northern States Power Co. v. Dep't of Energy, No. 97-1064 (D.C. Cir. Nov. 14, 1997), the Court of Appeals directed the utility plaintiffs to seek recovery of damages which may amount to "additional billions of dollars in additional costs" through contract remedies and directed DOE not to claim in defense "unavoidable delay." Slip op, at 10-11. The availability of the PFSF will provide storage capacity to those utilities with insufficient on-site capacity, and those utilities who have shutdown their nuclear reactors and who otherwise would be unable to decommission in a timely fashion. See ER § 8.1-2 (discussing the consequences of the "No Build Alternative").

the Environmental Report, is to provide interim storage brought about by DOE's failure to meet its statutory and contractual obligations. See ER at § 1.2-1. Indeed, the PFSF will make subsequent transportation to a permanent DOE repository more efficient by using the PFSF as a staging facility allowing for more efficient transportation campaigns. Id at 1.2-2; 1.2-3. Castle Rock is incorrect in asserting that Applicant has failed to describe a program for removing such spent nuclear fuel from the PFSF.

Castle Rock Contention 3 must be rejected. It impermissibly challenges a Commission rule. In any event, the NWPA did not repeal the Commission's authority to license an ISFSI under Part 72, and the proposed PFSF is not inconsistent in any way with DOE's obligations under the NWPA.

D. Castle Rock Contention 4: Attempts to Evade the Requirements of the NWPA

1. The Contention

Castle Rock alleges in Contention 4 that:

> The status of the Application suggests that DOE has either tacitly or directly agreed with PFS and its member utilities to allow the Application to proceed in an attempt to evade the statutory mandates of the NWPA.

Castle Rock Petition at 18. The asserted bases for the contention are set forth in four pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows, incorporating the specific allegations in its bases:

> The status of the Application suggests that DOE has either tacitly or directly agreed with PFS and its member utilities

to allow the Application to proceed in an attempt to evade the statutory mandates of the NWPA in that:

a) The NWPA assigns exclusively to DOE the responsibility for establishing a permanent repository for spent nuclear fuel, for establishment of an interim storage program using new technologies to expand on-site storage of spent nuclear fuel, for providing for 1,900 MTU of capacity for storage of spent nuclear fuel, for establishing a Monitored Retrievable Storage facility ("MRS"), and for taking title to certain spent nuclear fuel on January 31, 1998.

b) DOE has failed to intervene to prevent PFS from usurping DOE's responsibilities.

c) The PFSF will alleviate many of the consequences of DOE's failure to execute its responsibilities under the NWPA.

d) The Licensing Board can infer a conspiracy between PFS and DOE, and Castle Rock should be able to conduct discovery regarding the existence of any improper agreement between PFS and DOE.

2. Applicant's Response to the Contention

Applicant agrees that DOE has failed to execute its responsibilities in a number of respects under the NWPA.[70] Applicant agrees that the PFSF will alleviate some of the consequences of DOE's failure -- indeed, that is the intent of the PFSF. However, this Licensing Board has no jurisdiction over DOE for its failures under the NWPA. The United States Court of Appeals for the District of Columbia has retained jurisdiction over DOE relating to its failures to comply with the NWPA.[71]

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[70]See Applicant's Response to Castle Rock Contention 3 regarding a number of the inaccuracies and mischaracterizations of DOE's responsibilities under the NWPA. It is certainly true, however, that DOE has failed to meet is responsibility to begin disposing of spent nuclear fuel by January 31, 1998.
[71]See Northern States Power Co. v. Dep't of Energy, No. 97-1064, slip op. at 14 (D.C. Cir. Nov. 14, 1997).

There is no basis whatsoever for the preposterous assertion that PFS and DOE have entered into some express or tacit agreement to allow DOE to evade its statutory mandate, and Castle Rock offers no basis. Nor is such an allegation relevant to any issue before the Board. Rather, Castle Rock suggests that an inference of conspiracy can be drawn from DOE's failure to intervene in this proceeding. The suggestion is absurd. A clear, unequivocal contrary inference can be drawn from the actions brought against DOE by 37 electric utilities, including most of the utilities who have formed and own PFS, demanding that DOE meet its obligations under the NWPA.[72] The utilities which own PFS are insistent that DOE meet its statutory and contractual obligations to take title and possession of their spent nuclear fuel.

Castle Rock cannot cure its utter lack of basis or the irrelevancy of this contention by seeking discovery. As stated by the Commission in the 1989 statement of consideration to the amended rules:

> [A] contention is not to be admitted where an intervenor has no facts to support its position and where the intervenor contemplates using discovery or cross-examination as a fishing expedition which might produce relevant supporting facts.

54 Fed. Reg. 33,168, 33,171 (1989). Accord, Duke Power Company (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 NRC 460, 468 (1982), vacated in part on other grounds, CLI-83-19, 17 NRC 1041 (1983) (Rules of Practice do not permit "the filing of

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[72]Northern States Power, slip op. at 5-7..

a vague, unparticularized contention, followed by an endeavor to flesh it out through discovery against the applicant or staff.").

Castle Rock Contention 4 must be rejected as allegations against DOE for which this Licensing Board has no jurisdiction and as an allegation of a conspiracy between PFS and DOE without any basis.

E. Castle Rock Contention 5: Application for Permanent Repository

1. The Contention

The Castle Rock petitioners allege in Contention 5 that:

> The proposed PFSF is properly characterized as a de facto permanent repository, and the Application fails to comply with the licensing requirements for a permanent repository.

See Castle Rock Petition at 22. The asserted bases for the contention are set forth in several pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations raised in its bases:

> The proposed PFSF is properly characterized as a de facto permanent repository, and the Application fails to comply with the licensing requirements for a permanent repository in that:
>
> a) no permanent repository or other repository capable of receiving the fuel from the PFSF exists, or forseeably will exist at the time PFS proposes to dismantle the PFSF;
>
> b) at the present time, there is no facility or group of facilities in existence that could absorb 40,000 MTU of spent nuclear fuel when the proposed PFSF is

scheduled to be decommissioned, and there are no definitive plans for such a facility; and

c) a federally operated permanent repository is the only facility that could possibly absorb 40,000 MTU of spent nuclear fuel in forty years when PFS proposes to decommission the PFSF and the only federal repository site presently being considered is located near Yucca Mountain, Nevada for which construction cannot begin until (i) DOE completes site characterization and determines the site is suitable, (ii) the President submits a recommendation of the site the Congress, (iii) the Governor of the State of Nevada does not submit a notice of disapproval, or if such notice is submitted, Congress passes a resolution approving the site within 90 days, and (iv) the NRC licenses the repository at the site.

2. Applicant's Response to the Contention

Castle Rock Contention 5, asserting that the PFSF will become a permanent repository, is a direct challenge to the NRC's Waste Confidence Decision as reflected in 10 C.F.R. § 51.23 and, as such, is barred as a matter of law from being litigated in this licensing proceeding. The regulation, 10 C.F.R. § 51.23, provides, in relevant part, as follows:

a) The Commission has made a generic determination that, if necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 30 years beyond the licensed life for operation . . . of that reactor at its spent fuel storage basin or at either onsite or offsite independent spent fuel storage installations. Further, the Commission believes there is reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century, and sufficient repository capacity will be available within 30 years beyond the licensed life for operation of any reactor to dispose of the commercial

> high-level waste and spent fuel originating in such reactor and generated up to that time.
>
> b) Accordingly, . . . within the scope of the generic determination in paragraph (a) of this section no discussion of any environmental impact of spent fuel storage . . . in independent spent fuel storage installations (ISFSI) for the period following the term of the. . . initial ISFSI license or amendment for which application is made, is required in any environmental report, environmental impact statement, environmental assessment or other analysis prepared . . . in connection with the issuance of an initial license for storage of spent fuel at an ISFSI, or any amendment thereto.

10 C.F.R. § 51.23 (emphasis added).

This regulation is based directly on generic determinations made by the Commission in the Waste Confidence Decision (issued initially in 1984) as revised and reaffirmed by the Commission in September 1990. 55 Fed. Reg. 38,474 (1990) ("Review and Final Revision of Waste Confidence Decision"). In the 1990 revision, the Commission reaffirmed its first finding rendered initially in 1984, which declares as follows:

> The Commission finds reasonable assurance that safe disposal of high-level radioactive waste and spent fuel in a mined geologic repository is technically feasible.

55 Fed. Reg. at 38,475. Further, the Commission revised its second finding to state in relevant part as follows:

> The Commission finds reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century . . . .

55 Fed. Reg. at 38,474. This finding is expressly incorporated in the regulation 10 C.F.R. § 51.23(a) quoted above.[73]

Together, 10 C.F.R. § 51.23(a) and the Waste Confidence Decision lead to the inexorable conclusion that Castle Rock's Contention 5 that the PFSF might become a de facto permanent repository cannot be admitted in this licensing proceeding. Contrary to the Commission's generic determination of "reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century," Contention 5 would litigate whether such a repository would be available in about the year 2040 after the PFSF had operated for forty years (assuming its license were renewed). Both 10 C.F.R. § 2.758(a) and the case precedent discussed in Section II above bar litigation in this licensing proceeding of such a direct challenge to the generic determinations established by the Commission's Waste Confidence rulemaking. Other NRC decisions also unequivocally support this result. See, e.g., Pacific Gas and Electric Company, (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-93-1, 37 NRC 5,

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[73] The Commission has recently confirmed these generic determinations in issuing the final rule for "Environmental Review for Renewal of Nuclear Power Plant Operating Licenses." 61 Fed. Reg. 66,537 (Dec. 18, 1996). The Commission stated there as follows:

> The Commission believes that conditioning individual license renewal decisions on resolution of radioactive waste disposal issues is not warranted because the Commission has already made a generic determination, codified in 10 CFR 51.23, that spent fuel generated at any reactor can be stored safely and without significant environmental impacts for at least 30 years beyond a license renewal term and that there will be a repository available within the first quarter of the twenty-first century.

Id. at 66,538 (emphasis added).

29-30 (1993); Vermont Yankee Nuclear Power Corporation, (Vermont Yankee Nuclear Power Station), LBP-87-17, 25 NRC 838, 853-54. (1987).[74]

F. Castle Rock Contention 6: Emergency Planning and Safety Analysis Deficiencies

1. The Contention

Castle Rock alleges in Contention 6 that:

> The Application does not provide the reasonable assurance that the public health and safety will be adequately protected in the event of an emergency affecting the PFSF.

Castle Rock Petition at 26. The asserted bases for the contention are set forth in five pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, Applicant proposes that the contention be restated as follows, incorporating the specific allegations in its bases:

> The Application does not provide the reasonable assurance that the public health and safety will be adequately protected in the event of an emergency affecting the PFSF.
>
> a) The EP and SAR fail to consider the effect of fires in Skull Valley that could require extended evacuation of the PFSF.
>
> b) The smoke or heat associated with such a fire may interrupt normal cooling and air circulation of the casks.
>
> c) The EP and SAR fail to consider the effect of an emergency at a nearby facility requiring extended evacuation of PFSF and to discuss a response coordinated between the PFSF and said facility.

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[74] Affirmed in part and rev'd in part, ALAB-869, 26 NRC 13, reconsideration denied, ALAB-876, 26 NRC 277 (1987).

d) The EP and SAR fail to consider potential terrorist attacks connected with the 2002 Winter Olympics in Salt Lake City

2. Applicant's Response to the Contention

Castle Rock raises a number of issues under Contention 6, which we address in turn below.

a) Evacuation of the Proposed ISFSI Caused by Fires

Castle Rock asserts that the Emergency Plan and the SAR fail to consider the effect on the ISFSI of brushfires in the Skull Valley that could require an extended evacuation of the PFSF, which would be an emergency situation. Castle Rock Petition at 26 (citing EP §§ 2.4.1.7, 2.4.2.8). According to Castle Rock, neither the Emergency Plan nor the SAR contains a plan for mitigating such an event; for example, they do not address the availability of water to fight such a fire, measures for ensuring that groundwater is not contaminated by run-off from firefighting efforts, or the need to "quarantine" the ISFSI. Id. at 27.

This subcontention must be dismissed because it makes allegations without providing "concise statements of the alleged facts or expert opinion which supports" the allegations and it provides no "references to . . . specific sources and documents . . . on which the petitioner intends to rely to establish [said] facts or expert opinion." 10 C.F.R. § 2.714(b)(2)(ii). See also Section II.C. supra.

Castle Rock alleges that a brushfire that would require evacuation of the ISFSI is "highly possible" during the lifetime of the facility and that evacuation followed by fire

damage to the spent fuel casks could cause degradation of the fuel cladding, canisters, and casks. Castle Rock Petition at 27. While Castle Rock provides a factual basis for the occurrence of fires in the Skull Valley, its only basis for its allegation that such fires might cause the evacuation of the ISFSI is that a recent fire 20 miles from the proposed site "forced the evacuation of residents." Id. Castle Rock provides no facts or analysis to support its analogy between that fire and a hypothetical fire at the ISFSI. Id. 27-28. It provides no factual basis for its presumption that the duration of the brushfire immediately around the ISFSI or the peak temperatures resulting from it would pose a significant threat to either ISFSI personnel or the spent fuel casks. Id.; see EP at 2-15 to 16 (onsite fires below specified duration and temperature do not warrant classification as Alerts).[75] If a petitioner contends that a license application is inadequate on the basis of an analogy between the Applicant's facility and a proposed benchmark, the petitioner must establish that the benchmark is valid to show that the analogy raises a disputed material issue of fact with the Applicant. Yankee Atomic Electric Company (Yankee Nuclear Power Station), LBP-96-15, 44 NRC 8, 32 (1996); Yankee Atomic Electric Company (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 267 (1996) (petitioner must show "logical relationship" with alleged analogy). Castle Rock has not provided facts or analysis to establish a valid benchmark here.

Moreover, Castle Rock's Exhibit 1 shows that although many brushfires have occurred in the general vicinity of the Skull Valley since 1986, none have occurred in the

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[75] The ISFSI is less susceptible to fire than an ordinary home because it contains few combustibles. See EP §§ 2.1,3.2.

immediate vicinity of the PFSF site. See Castle Rock Exhibit 1. This brings the subcontention into further question. Cf. Vermont Yankee Nuclear Power Corporation (Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29, 48 (1989), vacated in part on other grounds and remanded, CLI-90-4, 31 NRC 333 (1990) (contention lacks cognizable basis if cited document does not support the point for which it is urged). See also Section II.C.1 supra at 14. Therefore, because Castle Rock has not provided sufficient factual and analytical basis to support its allegation that a brushfire could cause the evacuation of the ISFSI or damage the spent fuel casks, this subcontention must be dismissed.

This subcontention must be also dismissed because it mistakenly claims that Applicant failed to address relevant issues in the application. See Section II.C.2, supra. Contrary to Castle Rock's assertion, the EP and the SAR do address brush fires and the means for mitigating their consequences. See EP at 2-12 to 16, 3-5; SAR § 8.2.5. The EP states that fires of specified severity may warrant the declaration of an alert at the site. EP at 2-12 to 16. The ISFSI will possess a fire truck, firefighting equipment and trained personnel assigned to the site fire brigade to mitigate the effects of fires. EP at 3-5. Furthermore, the Applicant's firefighting capability will be supplemented by offsite Tooele County capabilities. Id. Regarding water supply, the onsite water storage tanks will be sized to handle onsite firefighting and other PFS needs. SAR at 2.5-5, 4.3-4 to 5. Additional water, if needed, can be obtained from the Reservation's water supply. ER at 4.2-4.

Moreover, "regulation[s] do[] not require dedication of [planning] resources to handle every possible accident [scenario] that can be imagined. The concept of . . . regulation is that there should be core planning with sufficient planning flexibility to develop a reasonable *ad hoc* response to . . . very serious low probability accidents . . . ." Philadelphia Electric Company (Limerick Generating Station, Units 1 and 2), LBP-84-31, 20 NRC 446, 535 (1984) (quoting Southern California Edison Company (San Onofre Nuclear Generating Station, Units 2 and 3), CLI-83-10, 17 NRC 528, 533 (1983)); accord 60 Fed. Reg. 32,430, 32,435-46 (1995) (Emergency Planning Licensing Requirements for ISFSI and MRS, Final Rule) ("Emergency planning focuses on the detection of accidents and the mitigation of their consequences . . . not . . . on the initiating events."). Therefore, the Applicant need not address any specific accident scenario in its EP so long as the EP provides for the capability to respond to such a scenario. Because Castle Rock has overlooked the response capability that the Applicant's EP provides, this subcontention must be dismissed.

Finally, Castle Rock provides no facts, expert opinion, or analysis whatsoever to support its allegations that groundwater might be contaminated by run-off from firefighting efforts, or that there would ever be any need to quarantine the ISFSI. See Castle Rock Petition at 26-27. A bald or conclusory allegation of dispute is not sufficient to admit the contention; the petitioner must show that "facts are in dispute," thereby demonstrating that an "inquiry in depth" is appropriate. See Section II.C.1 supra. Therefore, this subcontention must be dismissed.

b) The Effect of Fires on the Cooling of the Fuel Casks

Castle Rock alleges that the smoke and heat associated with a brushfire "may interrupt normal cooling and air circulation, causing degradation of fuel cladding, canisters, and storage cask concrete." Castle Rock Petition at 27. The application is allegedly inadequate because the EP and the SAR fail to identify and assess such "credible" emergency or accident conditions and do not contain a plan for mitigating these conditions. Id. This subcontention must be dismissed because it makes allegations without providing supporting facts or expert opinion and it provides no references to specific sources or documents to establish such facts or opinion. Furthermore, it provides no technical basis in references or expert opinion to support its claim that its accident scenario will cause an accidental release of radioactive materials.

If such a hypothetical brushfire were to occur at the site, Castle Rock provides no support for its allegation that the effects of the fire on the air circulation around the casks (as opposed to direct thermal effects, which are addressed supra in Subcontention (a)) could somehow lead to the degradation of the fuel, the canisters, and the casks and thus cause a radioactive release. See Castle Rock Petition at 26-27. The EP states that only blockage of the storage cask air inlet or outlet ducts by "snow, ice, dirt, or debris" for 48 hours would cause the cask concrete to reach its maximum allowable temperature. EP at 2-11; see also SAR at 8.1-9 to 10, 8.2-44 to 45. Castle Rock present no basis to even suggest that the alteration of air flow from a fire could cause the same result.

Georgia Tech, LBP-95-6, 41 NRC at 306-07, involved a similarly remote and speculative accident scenario. Petitioners in that case raised the contention that in the

event of an accidental release from the nuclear reactor at issue, a nearby reservoir would be vulnerable to "extensive contamination." Id. The Board ruled that

> This contention about an accidental release contaminating the . . . reservoir is merely an expression of [petitioner's] opinion. No basis is provided for any of these assertions. The Commission's regulations require, inter alia, that [petitioner] provide a concise statement of the alleged facts or expert opinion to support the contention, and sufficient information to show that a genuine dispute exists with the Applicant. 10 C.F.R. § 2.714(b)(ii) and (iii). [Petitioner] has not met these requirements.
>
> Specifically, [petitioner] has not provided a concise statement of the alleged facts relating to how an accidental release would occur and how such a release would contaminate the reservoir, nor what expert opinion [petitioner] intends to rely upon to prove the contention. Neither does [petitioner] make any references to any specific sources or documents upon which it intends to rely to prove the contention. Without these showings [petitioner] has not provided sufficient information to demonstrate that a genuine dispute exists with the Applicant regarding the postulated accidental release from the reactor and any subsequent contamination of the reservoir.

Id. at 307. Based on these considerations, the Georgia Tech Board ruled the contention inadmissible. Similarly, Castle Rock does not support its allegation with any fact, expert opinion, or documentation and its subcontention must be dismissed.

This subcontention must be also dismissed because it mistakenly claims that the Applicant failed to address relevant issues in the application. See, Section II.C.2. supra. First, the EP does indeed address the possibility that fires will occur at the site and the EP provides for their mitigation. See, supra, Subcontention (a). Second, the EP also

addresses the possibility that the air ducts of the spent fuel casks will become obstructed. EP at 2-11. Even complete blockage of the cask ducts for up to 12 hours would not warrant the declaration of an alert and the casks would not reach their maximum allowable temperature until the ducts were blocked for 48 hours straight. Id.[76] Moreover, the Applicant need not plan for every imaginable accident scenario so long as its EP provides for the capability to respond to such scenarios. See supra Subcontention (a). Therefore, because Castle Rock overlooks the Applicant's response capability, this subcontention must be dismissed.

c) Evacuation of the ISFSI Caused by Emergencies at Nearby Facilities

Castle Rock alleges that the EP and the SAR fail to consider the effect of potential emergencies at nearby facilities requiring "extended evacuation of the [ISFSI]," or compromising the safety of ISFSI personnel or the ISFSI's security and emergency response measures. Castle Rock Petition at 28. Castle Rock asserts that NUREG-1567, Standard Review Plan for Spent Fuel Dry Storage Facilities (Draft), § 2.4.2, (October 1996), requires the EP to include in its site area description "nuclear, industrial, transportation, and military installations" at distances greater than five miles from the site. Id. (quoting NUREG-1567 at 2-6). Moreover, the EP should describe the "products or materials produced, stored or transported" at such installations and discuss potential hazards to the ISFSI from the activities or the materials there. Id. (quoting NUREG-1567

[76] The Emergency Plan discussion of blockage of the air ducts is based on extensive analysis of this issue in the SAR. SAR §§ 8.1.3, 8.2.8.

at 2-6). Castle Rock goes on to assert that the following facilities in Tooele County are "significant" in that they conduct "extremely dangerous and volatile activities that might create an emergency condition at the ISFSI:"

> a) Dugway Proving Grounds: Weapons testing and a landing field;
>
> b) Department of Defense Chemical Weapons Incinerator: Incineration of Chemical Weapons;
>
> c) Tooele Army Depot: Storage of Chemical Weapons;
>
> d) Wendover Air Force Bombing Range: Testing and practice of air-to-ground bombing;
>
> e) Hill Air Force Bombing Range: Testing and practice of air-to-ground bombing;
>
> f) Aptus Hazardous Waste Incinerator: Low-level hazardous waste incineration;
>
> g) Laidlaw Hazardous Waste Incinerator and Landfill: Low-level hazardous waste incineration;
>
> h) Envirocare of Utah Low-level Waste Disposal Facility: Low-level radioactive waste disposal.

Id. at 28-29. Castle Rock alleges that "with the exception of a cursory discussion," the Applicant fails to describe the products or materials handled at the facilities and the potential hazards they pose to the ISFSI. Id. at 29. Moreover, the application is allegedly inadequate because it does not discuss a "program for a coordinated [emergency] response" between the ISFSI and the other facilities. Id. at 30.

This subcontention must also be rejected because it makes allegations without providing supporting facts or expert opinion and it provides no references to specific sources or documents to establish such facts or opinion. Furthermore, it provides no

"technical basis in references or expert opinion" to support its claim that its accident scenarios will cause an accidental release of radioactive materials. Castle Rock asserts that emergencies or accidents at the installations on its list could pose a threat to the ISFSI without providing any basis, beyond the most general nature of the activities there, for believing that they pose a genuine danger. See Castle Rock Petition at 28-29.[77] It states that activities at the installations are "extremely dangerous and volatile" without further description and without indicating any mechanism by which they could affect the ISFSI. See id. It provides no support whatsoever for its remarks about "radioactive, chemical or biological contaminants or explosives" being spread "throughout Tooele County." Id. at 29. Moreover, all of the installations Castle Rock cites, other than Dugway Proving Ground and the Tooele Army Depot, are at least 18 miles from the ISFSI site. State of Utah's Request for Hearing and Petition for Leave to Intervene at 4-5, and Exhibit 1, September 11, 1997. Castle Rock has provided no explanation as to how facilities that distance from the ISFSI could pose any danger at all to the ISFSI.

The Georgia Tech analysis is equally appropos here. Castle Rock has offered no factual basis as required to support it allegation but only bald, conclusory allegations. Such bald conclusory allegations of dispute are not sufficient to admit a contention. Because Castle Rock has provided no more than that, this subcontention must be dismissed.

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[77] Castle Rock provides some documentary support for the existence of potential threats at Dugway Proving Ground and Tooele Army Depot, see Castle Rock Petition at 29, but as described infra the Applicant has addressed those installations in detail in the SAR. See SAR at 2.2-1 to 4.

Moreover, this subcontention must be dismissed because it ignores relevant material submitted by the Applicant. The only installations for which Castle Rock provides any factual support for its allegations of danger to the ISFSI are Dugway Proving Ground and Tooele Army Depot, see Castle Rock Petition at 29, which the Applicant has analyzed in detail. See SAR at 2.2-1 to 4. The SAR has assessed the threat from weapons-related activities and the Army airfield at Dugway and has determined that because of the distance from the site and the intervening terrain that they do not endanger the ISFSI. Id. at 2.2-2 to 3. Likewise it has addressed the threat from the Tooele Army Depot chemical munitions storage and incineration activities and reached the same conclusion. Id. at 2.2-4. Castle Rocks ignores this analysis and fails to identify any respect in which it is inadequate and therefore its contention must be dismissed. See Section II.C.2. supra.

Finally, there is no requirement anywhere in Part 72, contrary to Castle Rock's bald assertion, that an ISFSI licensee participate with any organizations in planning for emergencies away from the ISFSI site. 10 C.F.R. § 72; see Castle Rock Petition at 30. An ISFSI that will not process and/or repackage spent fuel is not required to have an offsite component to its emergency plan. 60 Fed. Reg. 32,430, 32,435 (1995) (10 C.F.R. § 72.32, Statement of Considerations); Northern States Power Company (Independent Fuel Storage Installation) Director's Decision under 10 C.F.R. § 2.206 (DD-97-24), 62 Fed. Reg. 51916, 51,917 (1997). Therefore, there is no requirement that the Applicant coordinate with any offsite organizations regarding offsite emergencies and this

subcontention must be dismissed as an impermissible collateral attack on the NRC's rules. See Section II.B. supra.

d) Terrorist Attacks During the 2002 Olympics

Castle Rock claims that the Applicant has failed to address the potential threat posed to the ISFSI from possible terrorist attacks in conjunction with the 2002 Winter Olympics to be held in Salt Lake City. Castle Rock Petition at 30. Castle Rock asserts that the Applicant must analyze the potential for attacks, outline heightened security measures to be emplaced, and discuss plans for coordinating security measures with Olympic and Federal officials. Id.

This subcontention must be dismissed as an impermissible collateral attack on the NRC's regulations for advocating stricter requirements than they impose. See Section II.B. supra. The Applicant need not consider site-specific security threats to the ISFSI unless expressly required by the NRC. See 10 C.F.R § 73.46(a). The design basis threat of radiological sabotage for a nuclear facility is defined in 10 C.F.R. § 73.1(a)(1). See Pacific Gas and Electric Company (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-653, printed as an Attachment to CLI-82-19, 16 NRC 53, 59. The design basis threat for a nuclear facility is generic rather than site-specific. See Diablo Canyon, ALAB-653, 16 NRC at 74. There is no need for the Applicant or the NRC staff to perform site-specific analyses of potential threats that are specific to the Applicant's proposed facility. Id. Nor is it necessary for the Applicant or NRC staff to understand, characterize, and analyze the attributes of potential attackers in light of the site-specific

conditions at the proposed facility, because the characteristics and attributes of the generic design basis adversary are set forth in the regulations. Id. at 75.

Having the Olympic Games in the immediate proximity of a nuclear facility that normally has no armed guards or substantial barriers may present special circumstances for which enhanced security measures may be required by the Commission. Georgia Tech, LBP-95-6, 41 NRC at 281, 294-95 (research reactor within one mile of the Olympic Village for the 1996 Atlanta Olympics). Whether there is substantial threat to an NRC-licensed nuclear facility relative to the Olympic Games is an issue to be determined by the Federal Bureau of Investigation ("FBI") as the lead law enforcement agency in charge of the Olympics. See id. at 294. Neither the FBI, nor the Commission, has made a finding that the 2002 Winter Olympics in Salt Lake City poses a substantial threat to the PFSF that would require the imposition of special circumstances for the PFSF design basis threat for sabotage. It is also notable that the PFSF is located some 50 miles away from Salt Lake City, whereas the nuclear reactor in the Georgia Tech case was located less than one mile away from the Olympic Village (and even in that case there was no finding from the FBI that the Olympics posed a substantial threat to the facility that would change the design basis threat for sabotage). See id.

Therefore, because the Commission has not made a finding of special circumstances, there is no need for the Applicant or the NRC staff to perform site-specific analyses of potential threats that are specific to the Applicant's proposed facility, including any potential terrorist threat associated with the 2002 Winter Olympics. Diablo

Canyon, ALAB-653, 16 NRC at 74. Thus this subcontention must be dismissed as a collateral attack on the Commission's regulations.

G. Castle Rock Contention 7: Inadequate Financial Qualifications

1. The Contention

Castle Rock alleges in Contention 7 that:

> The Application does not provide assurance that PFS will have the necessary funds to cover estimated construction costs, operating costs, and decommissioning costs, as required by 10 C.F.R. § 72.22(e).

Castle Rock Petition at 30. The asserted bases for the contention are set forth in 11 pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its bases:

> The Application does not provide assurance that PFS will have the necessary funds to cover estimated construction costs, operating costs, and decommissioning costs, as required by 10 C.F.R. § 72.22(e) in that
>
> a) PFS is a limited liability company organized and existing under the laws of Delaware. As such, its members are not individually liable for its debts, obligations and liabilities and are not obligated to advance additional monies beyond agreed upon contributions. Moreover, PFS is subject to termination in accordance with the terms of its agreement and Delaware law.
>
> b) PFS has failed to provide adequate financial assurance that revenues from customers pursuant to Service Agreements will provide sufficient funds to cover operating and decommissioning costs because (i) PFS has omitted meaningful detail from the Application

concerning the rights and obligations of parties under the Service Agreements and (ii) if operating costs exceed PFS's customers ability to pay, or if over the passage of time some customers suffer financial crises or go out of business, PFS will not have sufficient income to cover operating costs.

c) PFS's proposed financing plan does not account for non-routine expenses of operation and decommissioning, such as an accident in transporting, storing, or disposing of spent fuel or other emergencies, fires, accidents, or injuries to neighbors.

d) The Application fails to provide enough detail concerning the limited liability company agreement between PFS's members, the Service Agreements to be entered with customers, the business plans of PFS, and the financial obligations of PFS in order to evaluate and to establish PFS's financial qualification. In accordance with the decision in Louisiana Energy Services, L.P. (Claiborne Enrichment Center), LBP-96-25, 44 N.R.C. 331 (1996), 10 C.F.R. § 50.33(f) should be used as the framework for reviewing PFS's financial qualifications and PFS must provide the information required by 10 C.F.R. § 50.33(f) and 10 C.F.R. Part 50, App. C.II.

e) The application fails to describe the legal obligations of the Skull Valley Band to compensate third parties for accidents or injuries arising from acts or omissions of the Band or, alternatively, fails to describe PFS's willingness to submit to the jurisdiction of the courts in lieu of the Band and to indemnify third parties for any injuries caused by acts or omissions of the Band.

f) The Application fails to comply with 10 C.F.R. § 72.22(e) because it fails to itemize or justify PFS's estimates of the cost of constructing, operating, or decommissioning the PFSF.

2. Applicant's Response to the Contention

a) Limited Liability Company

Castle Rock asserts that three financial concerns flow from PFS's organization as a limited liability company. These are (i) its members are not individually liable for its debts, obligations and liabilities; (ii) its members are not obligated to advance additional monies beyond agreed upon contributions; and (iii) PFS is subject to termination in accordance with the terms of its agreement and Delaware law. Based on these uncertainties Castle Rock contends that "the application fails to provide adequate assurance that PFS will continue to exist, let alone have sufficient funds for operation, over the potential duration of the PFSF." Castle Rock. Petition at 34.

This subcontention must be dismissed for a lack of basis. The Commission's amended pleading requirements "places an initial burden on Petitioners to come forward with reasonably precise claims rooted in fact, documents, or expert opinion in order to proceed past the initial stage and toward a hearing." Yankee Atomic Electric Company (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 262 (1996). Castle Rock's claim is not "rooted in fact, documents, or expert opinion," but in speculation. It speculates that the attributes it cites of a limited liability company will make PFS financially unstable. Castle Rock Petition at 32. Castle Rock fails to note that the irony of this claim is that Castle Rock itself is a "limited liability company." Castle Rock Petition at 1. Moreover, the very attributes cited by Castle Rock are applicable to corporations as well.[78] They provide no bases on which to challenge whether the

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[78] In this regard (1) the shareholders of a corporation like the members of a limited liability company are not individually liable for the corporation's debt; (2) shareholders are not obligated to advance additional monies beyond their initial share investment; and (3) corporations are subject to termination in accordance with state law and company charters.

Applicants have put forth "a reasonable financing plan" for funding the project which is the issue for the Board to decide under applicable Commission precedent.[79]

Such speculation cannot be the basis for admitting a contention that an applicant lacks reasonable assurance of obtaining funding. As stated by the Commission in Vermont Yankee in holding that speculation of possible bankruptcy or default was insufficient to admit a contention:

> Petitioners say that the Power Contracts are nonetheless insufficient to provide reasonable assurance of decommissioning funding, but Petitioners offer no contract language, case law, or expert opinion justifying their view. Instead, they merely argue, based primarily on the prior (and now resolved) bankruptcy of PSCNH, that YAEC plan may not be fully funded because of possible contract breaches. Petitioners . . . offer no supporting evidence for their conjecture . . . .

Yankee Atomic, CLI-96-7, 43 NRC at 262-63.

Similarly here, Castle Rock has provided no supporting evidence for its conjecture and its contention must be dismissed.

b) Sufficient Funds to Cover Operations and Decommissioning Costs

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[79] Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), CLI-78-1, 7 NRC 1, 18 (1978), *affirmed sub nom*, New England Coalition on Nuclear Pollution v. NRC, 582 F.2d 87 (1st Cir. 1978). In that case the Commission spoke to what constitutes "reasonable assurance" in the context of financial qualifications, stating as follows:

> "[R]easonable assurance" does not mean a demonstration of near certainty that an applicant will never be pressed for funds in the course of construction. It does mean that the applicant must have a reasonable financing plan in the light of relevant circumstances."

7 NRC at 18 (emphasis added). In a similar vein the Commission has recently recognized in the context of decommissioning that the reasonable assurance standard does not require "an absolute guarantee of such funds." Yankee Atomic, supra., CLI-96-7, 43 N.R.C. at 262.

Castle Rock contends in this subcontention that PFS has failed to provide adequate financial assurance that revenues from customers pursuant to Service Agreements will provide sufficient funds to cover operating and decommissioning costs because (i) PFS has omitted meaningful detail from the Application concerning the rights and obligations of parties under the Service Agreements, and (ii) if operating costs exceed PFS's customers' ability to pay, or if during passage of time some customers suffer financial crises or go out of business, PFS will not have sufficient income to cover operating costs. Castle Rock Petition at 35.

The first part of this subcontention concerning the obligation of customers to make payments must be dismissed because it ignores relevant information in the License Application. The Application provides with respect to the obligations of customers as follows:

> The Service Agreements will provide assurance for the continued payment of these costs by requiring the customers to provide annual financial information, meet creditworthiness requirements, and, if necessary, provide additional financial assurances (such as an advance payment, irrevocable letter of credit, third-party guarantee, or a payment and performance bond).

LA at 1-6, 1-7. Castle Rock provides no basis why these mechanisms set forth in the License Application are inadequate to provide reasonable assurance other than pure conjecture of the type rejected by the Commission in Yankee Atomic, CLI-96-7. It sets forth "no facts, documents, or expert opinion" to establish a basis on which to challenge

the adequacy of these mechanisms as required by the Commission's decision in Yankee Atomic.

The second part of this subcontention must also be rejected for lack of sufficient basis. There Castle Rock claims that if operating costs exceed PFS's customers' ability to pay, or if over the passage of time some customers suffer financial crises or go out of business, PFS will not have sufficient income to cover operating costs. Castle Rock. Petition at 35. However, this is pure speculation of the type rejected by the Commission in Yankee Atomic lacking supporting facts, documents or expert opinion. As stated by the Commission there, "[p]etitioners must submit more than this in order for a contention to be admitted for litigation." Yankee Atomic, CLI-96-7, 43 NRC at 261. Thus, this subcontention must be dismissed.

c) Non-Routine Expenses

Castle Rock contends in this subcontention that PFS's proposed financing plan for the PFSF does not account for non-routine expenses of operation and decommissioning, such as an accident in transporting, storing, or disposing of spent fuel or other emergencies, fires, accidents, or injuries to neighbors.

This subcontention must be dismissed for lack of basis. Castle Rock has provided absolutely no basis for its assertion that PFS -- with projected operating expenses of approximately $1 billion over its expected lifetime[80] -- will not be able to pay for non-routine expenses. The only actual instance suggested by Castle Rock where PFS would

[80] See EP § 7.3 and Table 7.3-1.

lack financial resources concerns radiological accidents for which Castle Rock claims that "expenses could be enormous." Castle Rock Petition at 36. Castle Rock has, however, set forth no basis for a credible accident involving the storage of materials at the proposed ISFSI, or the spill and release of nuclear materials. Commission precedent is clear that "when [a] postulated accident scenario provides the premise for a contention, a causative mechanism for the accident must be described and some credible basis for it must be provided." Vermont Yankee Nuclear Power Corporation. (Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29, 44 (1989), vacated in part on other grounds and remanded, CLI-90-4, 31 NRC 333 (1990). Moreover, a petitioner must provide the technical analyses and expert opinion or other information showing why its asserted factual bases support its contention and a licensing Board may not make factual inferences on [the] petitioner's behalf. See Section II.C.1. supra.

In short, Castle Rock has completely failed to provide such a basis for its subcontention and therefore it must be rejected.

d) Lack of Information

In this subcontention, Castle Rock contends that the Application fails to provide enough detail concerning the limited liability company agreement between PFS's members, the Service Agreements to be entered with customers, the business plans of PFS, and the financial obligations of PFS in order to evaluate and to establish PFS's financial qualification. According to Castle Rock, the financial qualification provisions of 10 C.F.R. Part 50 should be used as the framework for establishing the information

required by PFS for review. It cites Louisiana Energy Services, L.P. (Claiborne Enrichment Center), 44 NRC 331 (1996) ("LES") as authority for the application of 10 C.F.R. Part 50 financial qualification requirements to a 10 C.F.R. Part 70 license application.

The basis for this contention has disappeared with the Commission's overturning of the licensing board's LES decision, Louisiana Energy Services, L.P. (Claibourne Enrichment Center), CLI-97-15, slip op. (December 18, 1997), holding that 10 C.F.R. Part 50 financial requirements do not as a matter of law apply in the context of 10 C.F.R. Part 70. This subcontention "advocat[es] stricter requirements than those imposed by the regulations" and therefore must be rejected as "an impermissible collateral attack on Commission rules." See Section II.B. supra at 6-7. Neither does the logic underlying the licensing board's LES decision apply here. See Applicant's Response to Utah Contention E, supra.

Thus, Castle Rock's claim that PFS must submit more detailed information, whether in accordance with 10 C.F.R. Part 50 requirements or independently thereof, must be rejected as "advocating stricter requirements than those imposed by the regulations" and therefore "an impermissible collateral attack on Commission rules." Id.

Moreover, this subcontention must be dismissed because it does not provide any basis to show that the alleged deficiency will result in a lack of reasonable assurance of PFS obtaining the funds necessary to cover the construction and operation of the PFSF. In the context of decommissioning, the Commission has held that a petitioner challenging

the adequacy of decommissioning funding or the decommissioning plan funding must do more than assert deficiencies in the plan or its estimates. Rather, the petitioner "must show some specific, tangible link between the alleged errors in the plan and the health and safety impacts they invoke." Yankee Atomic, supra, CLI-96-7, 43 NRC at 258. Thus, for example, challenges to the reasonableness of an applicant's decommissioning cost estimates are not admissible unless the petitioner shows that "there is no [ ] reasonable assurance that the amount will be paid." Yankee Atomic Electric Company (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1, 9 (1996). Without such a showing, the only relief available would be "the formalistic redraft of the plan with a new estimate." Id.

The same rationale would apply equally to challenges to the reasonable assurance of obtaining funds for construction and operation. A petitioner must show that its contentions have some health and safety significance, or else the Commission would be engaged in merely requiring additional information or analysis of no health and safety significance. Yankee Atomic, CLI-96-2, 43 NRC at 75. See also Yankee Atomic, CLI-96-7. Here Castle Rock merely seeks additional information without establishing any basis for its significance and thus the contention must be rejected. Id.

e) Compensation of Third Parties for Skull Valley Band Liability

Castle Rock contends that the application fails to describe the legal obligations of the Skull Valley Band to compensate third parties for accidents or injuries arising from acts or omissions of the Band. Castle Rock contends that either the Band must agree to

provide such compensation or alternatively PFS must submit to the jurisdiction of the courts in lieu of the Band and to indemnify third parties for any injuries caused by acts or omissions of the Band.

At the outset this contention must be dismissed for vagueness and lack of specificity. It fails completely to identify what acts or omissions by the Tribe would give rise to third party liability and how those acts or omissions would relate in any manner to the Applicant or the PFSF. It fails to cite to a legal or regulatory basis that would require the Application to include a description of the Band's legal obligation to compensate third parties. Thus, this subcontention must be dismissed for not containing a specific statement of the issue of law or fact to be raised or controverted. Moreover, this contention is completely devoid of both legal and factual basis. Castle Rock has identified no legal or factual basis on which PFS would be liable to third parties for acts or omissions of the Band. Under the Commission's rules of pleading a basis of supporting facts, documents or expert opinion must be supplied. Castle Rock has failed to do so here. Accordingly, the subcontention must be dismissed. Finally, the contention must be dismissed for failure to provide any underlying legal basis for the proposed requirement that PFS submit to the jurisdiction of courts in lieu of the Band or to indemnify third parties for injuries caused by acts or omissions of the Band.

f) Inadequate Detail of Cost Estimates

In this subcontention, Castle Rock contents that the Application fails to comply with 10 C.F.R. § 72.22(e) because it fails to itemize or justify PFS's estimates of the cost

of constructing, operating, or decommissioning the PFSF. According to Castle Rock an applicant must itemize such costs in order to enable third party review.

This contention must be dismissed as an impermissible challenge to agency regulation and for lack of a sufficient factual basis. 10 C.F.R. § 72.22(e) does not require detailed cost estimates in order to comply with its provisions. Indeed, as discussed above and with regard to Utah Contention E, the Commission declined to apply the more detailed requirements of 10 C.F.R. Part 50 in the content of 10 C.F.R. Part 72 applications. Therefore, Castle Rock's contention must be rejected as advocating stricter requirements than those imposed as the regulations and therefore an impermissible collateral attack on commission rules.

Further, Castle Rock has provided no factual basis to show that the estimated costs are unreasonable. It has provided no facts, expert opinions or documents to support an allegation that Applicant's cost estimates are unreasonable as it is required to do under the Commission's amended rules of pleadings. Moreover, Castle Rock must provide some basis that the alleged inadequacies of the cost estimates will result in an actual shortfall of funds for the construction operation on decommissioning of the PFSF. See Yankee Atomic, supra, CLI-96-1, 43 NRC at 9. Castle Rock has failed on this account as well. Thus, this subcontention must be dismissed.

Finally, this subcontention must be dismissed as seeking discovery. Castle Rock claims that detailed itemization of the cost estimates must be provided to enable third party review. However, this is in effect a request for discovery to overcome a lack of

sufficient basis in the pleadings which is completely inappropriate in the contention phase. As stated by the Commission in the 1989 statement of consideration to the amended rules:

> [A] contention is not to be admitted where an intervenor has no facts to support its position and where the intervenor contemplates using discovery or cross-examination as a fishing expedition which might produce relevant supporting facts.

54 Fed. Reg. 33,168, 33,171 (1989). Accord, Catawba, ALAB-687, 16 NRC at 468. (Rules of Practice do not permit "the filing of a vague, unparticularized contention, followed by an endeavor to flesh it out through discovery against the applicant or staff."). Thus, Castle Rock's claimed need to review itemized cost information in order to come up with a basis for its contention must be rejected.

H. Castle Rock Contention 8: Groundwater Quality Degradation.

1. The Contention

Castle Rock alleges in Contention 8 that:

> The Application, including the ER, is defective and therefore raises the issue of risk to public health and safety because the proposed site of the PFSF will not, or cannot, be adequately protected against ground water contamination due to facility design, its location, contaminants it will generate, and the nature of the soils and bedrock of the area.

Castle Rock Petition at 40. The asserted bases for the contention are set forth in one page of discussion following the contention. In order to focus the analysis on whether the

contention should be admitted, the Applicant proposes that the contention be restated incorporating as follows the specific allegations in its bases:

> The Application, including the ER, is defective and therefore raises the issue of risk to public health and safety because the proposed site of the PFSF will not, or cannot, be adequately protected against ground water contamination due to facility design, its location, contaminants it will generate, and the nature of the soils and bedrock of the area, in that
>
> a) Firefighting activities will cause the release of contaminated water into the surrounding soil and groundwater.
>
> b) The ER is silent as to what technology, strategies and procedures will be used to prevent such groundwater contamination and on steps PFS plans to take to remedy any contamination problems.

2. Applicant's Response to the Contention

Castle Rock's Contention 8 is totally flawed under the Commission's Rules of Practice, as amended, and must be rejected. As discussed in more detail below, Castle Rock's contention at page 41 that fire fighting activities will release contaminated water to the surrounding soil and groundwater fails because it is an assertion without factual support. Also, Castle Rock's contention at page 41 that the Environmental Report is silent on technology, strategies and procedures used to prevent groundwater contamination and remedy any contamination problems fails because it is simply wrong.

a) Firefighting Activities

Castle Rock contends that firefighting will cause the release of contaminated water into the surrounding soil and groundwater based on its statements that (1) in

Section 3.4 of the Environmental Report, the Applicant acknowledges that low-level radioactive wastes will likely be generated at the PFSF site and temporarily stored on site, and (2) various solid wastes and potentially hazardous wastes will undoubtedly be generated at the site. This is not only a mischaracterization of the Applicant's statement that low level waste "may" be generated at the PFSF site, but also reflects Castle Rock's misunderstanding that the design of the PFSF is based on a "Start Clean/Stay Clean" philosophy to ensure that there will be negligible contamination within the facility and negligible radioactive waste generated. SAR Section 1.2. At the originating nuclear power plants, the shipping casks are surveyed and decontaminated as necessary so that contamination concentrations are below the DOT criteria (49 CFR § 173.443) (SAR Section 6.3). Upon receipt of shipping casks at the PFSF, the casks are again surveyed to ensure that radiation and contamination levels are still below regulatory requirements. Any contamination is removed using dry decon swipes that would be disposed of as solid activated waste, thus avoiding the generation of liquid wastes. This is in accordance with the PFS policy of precluding the generation of liquid radioactive waste. Considerable information discussing PFSF design features for contamination prevention and control as well as site generated waste confinement and management is presented throughout SAR chapters 3, 4, 5, 6 and 7.

The Environmental Report also states that radioactive liquid wastes are not generated at the PFSF. See e.g., ER Section 3.4. Small quantities of dry low level solid waste may be generated, consisting of smears, disposable clothing, tape, blotter paper, rags, and related health physics material. This material will be collected, identified,

packaged in suitable containers in accordance with 10 CFR Part 20 requirements and temporarily stored in a holding area while awaiting removal to a low level waste disposal facility, e.g., the Envirocare facility. Id. Additionally, the inside environment of the canister-based storage system is an inert gas (helium). There are no liquids on the inside of the canister and the canister is seal welded to preclude liquids from entering. SAR Section 6.3.

With this system, there is no credible scenario in which the firefighting water is contaminated as the contention suggests. There is no accident that would cause contaminated liquid to flow into the ground (SAR Section 6.3) much less the ground water, which is over 100 feet below the surface (SAR Section 2.5.2). Hence, Castle Rock's contention that firefighting will release contaminated water to the surrounding soil and groundwater fails because it does not controvert the facts and conclusion of the Applicant. As required under the NRC amended rules of practice, Castle Rock has not provided any factual support or expert opinion to provide a basis for this contention. Indeed, the contention must fail because no credible scenario has been presented which demonstrates that fire fighting activities will release contaminated water to the surrounding soil and groundwater.

b) Technology, Strategies and Procedures to Prevent Groundwater Contamination

Castle Rock's Contention 8 also fails because it is mistaken in its assertion that "[t]he ER is silent as to what technology, strategies and procedures will be used to prevent such groundwater contamination . . . ." Castle Rock Petition at 41. Section 2.5.5

of the Environmental Report states that operation of the PFSF will have no measurable offsite effects on existing groundwater quality or levels. Section 2.5.6 of the Environmental Report explains that the nature and form of the material stored (spent fuel rod assemblies) and the method of storage (dry casks) preclude the possibility of a liquid contaminant spill. Therefore, discussion of potential contamination of groundwater is not realistic. Section 4.5 of the Environmental Report also explains that operation of the site will have no effects on existing groundwater quality.

Castle Rock has not provided any factual basis or credible scenario to show that a genuine dispute exists with the Applicant on a material issue of fact,or law. Hence, Castle Rock's contention in this regard must be rejected.

I. Castle Rock Contention 9: Regional and Cumulative Environmental Impacts

1. The Contention

Castle Rock alleges in Contention 9 that:

> The Application fails to adequately discuss the regional and cumulative environmental impacts of the proposed PFSF, as required by 10 C.F.R. §§ 72.98(b) & (c), 72.100, and NEPA.

Castle Rock Petition at 41. The asserted bases for the contention are set forth in three pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its bases:

> The Application fails to adequately discuss the regional and cumulative environmental impacts of the proposed PFSF,

as required by 10 C.F.R. §§ 72.98(b) & (c), 72.100, 72.122(e), and NEPA.

a) The ER and SAR are defective because they fail to address the cumulative regional health and safety impacts of the ISFSI and other dangerous facilities in Tooele County.

b) The ER and the SAR must address the cumulative quantitative risk to the public of so many dangerous facilities in one county

2. Applicant's Response to the Contention

Castle Rock raises a number of issues under Contention 9, which we address in turn below.

a) Cumulative Health and Safety Impacts in Tooele County

Castle Rock asserts that the application (the Environmental Report and the SAR) are deficient because they do not address the "regional and cumulative environmental impacts of the proposed PFSF." Castle Rock Petition at 41. Castle Rock asserts that "Tooele County is already the location of an unusually large number of facilities and operations with serious environmental impacts." Id. at 42 (listing 11 facilities in Tooele County). The "concentration of so many high impact facilities in such a relatively small area requires adequate environmental and safety analysis which is wholly lacking in the Application and ER." Id. (citing 10 C.F.R. §§ 72.98(b) & (c), 72.100, and 72.122(e)).

This subcontention must be dismissed because it makes allegations without providing "concise statement[s] of the alleged facts or expert opinion which support" the allegations and it provides no "references to . . . specific sources and documents . . . on which the petitioner intends to rely to establish [said] facts or expert opinion." 10 C.F.R.

§ 2.714(b)(2)(ii). As Applicant discussed above in its response to Contention K, for contentions that an application is deficient regarding its analysis of allegedly cumulative environmental effects, the petitioner must specify the effects and must come forward with specific facts and reasons to show that such effects will occur. In particular, it must come forward with specific information regarding the incremental effects of the proposed action and it must show why the applicant's analysis of the pre-existing effects with which the effects of the proposed action will supposedly be cumulative is wrong.

This subcontention must be dismissed because Castle Rock has come forward with no data whatsoever and has not provided reasons to show that cumulative environmental effects will occur. See Castle Rock Petition at 41-44. Castle Rock claims that the facilities it lists have "serious environmental impacts," but it does not describe any impacts. Id. at 42. It merely names the facilities and, for some of them, lists their alleged principal activity. Id. Castle Rock speculates about "possible interrelated risks" such as "burdens on transportation corridors of large quantities of hazardous and radioactive wastes, increased chance of terrorism and sabotage, increased chance of accidents involving multiple facilities." Id. at 43. But it provides no data concerning those risks and no reasons to show that those risks will result in environmental effects cumulative with those of the Applicant's ISFSI. Id. at 42-44. Moreover, it provides no data whatsoever regarding the ISFSI or its incremental environmental effects. Id. And beyond claiming (wrongly) that the Applicant has not addressed cumulative environmental impacts, Castle Rock does not provide any reasons to question the Applicant's assessment. Id. Therefore, because Castle Rock has not specified or come

forward with facts regarding the environmental effects with which the effects of the ISFSI would supposedly be cumulative, because it has not provided any data on the allegedly incremental effects of the ISFSI, and because it has not provided reasons why the effects would occur, or why the Applicant's assessment of cumulative impacts is wrong, this subcontention must be dismissed.

This subcontention must also be dismissed because it ignores relevant material submitted by the Applicant. The Environmental Report addresses the cumulative environmental impact of the ISFSI and other sources where they are relevant. See, e.g., ER §§ 4.1.7, 4.2.7. For example, the Environmental Report addresses the cumulative impact of truck and other vehicular traffic on Skull Valley road in terms of air pollution, impediments to traffic flow, and noise. Id. §§ 4.1.3, 4.1.7, 4.2.3, 4.2.7. It estimates the cumulative radiological and non-radiological impact on various offsite personnel of loading, sealing and transporting spent fuel canisters and casks. Id. § 4.7. Moreover, the Applicant has considered the potential impact of other facilities in Tooele County on the ISFSI and has found that it is unlikely that they would have any. See SAR § 2.2. For example, the Applicant has considered the effects of operations at the Tekoi Rocket Engine Test Facility, Dugway Proving Ground, and Tooele Army Depot, the industrial, transportation, or military facilities closest to the site, and has found that they would pose no threat to the ISFSI because of the distance to them and the presence of intervening terrain. SAR at 2.2-1 to 4. Besides its unsupported generic allegation, Castle Rock provides no information to the contrary. Therefore, because Castle Rock has ignored this material, this subcontention must be dismissed. See Section II.C.2. supra.

b) Cumulative Quantitative Risk

Castle Rock claims that "[a] number of cumulative/regional impact/effects issues must be addressed, including . . . the cumulative quantitative risk to the public of so many facilities in one county." Castle Rock Petition at 43.

First, this subcontention must be dismissed because Castle Rock has not provided sufficient factual basis to support a contention regarding cumulative environmental impacts. See supra Subcontention (a).

Moreover, this subcontention must be dismissed as "an impermissible collateral attack on the Commission's rules" for "advocat[ing] stricter requirements than those imposed by the regulations." See Section II.B. supra at 57. NRC regulations do not require an applicant to assess cumulative quantitative environmental risk in its environmental analysis. First, 10 C.F.R. § 51.45 states that:

> The analyses for environmental reports shall, to the fullest extent practicable, quantify the various factors considered. To the extent that there are important qualitative considerations or factors that cannot be quantified, those considerations or factors shall be discussed in qualitative terms.

10 C.F.R. § 51.45(c) (emphasis added). Thus the NRC does not impose an absolute requirement that the Applicant even quantify all environmental impacts, let alone cumulative risk to the public.

Second, courts have held that not all environmental impacts or risks must be quantified. An environmental analysis must contain "sufficient discussion of the relevant issues and opposing viewpoints to enable the decisionmaker to take a 'hard look' at the

environmental factors and to make a reasoned decision." Limerick Ecology Action, Inc. v. NRC, 869 F.2d 719, 737 (3d Cir. 1989); Town of Norfolk v. EPA, 761 F. Supp. 867, 873 (D. Mass. 1991), aff'd, 960 F.2d 143 (1st Cir. 1992). But such analysis must be guided by a "rule of reason[.]" Limerick Ecology Action, 869 F.2d at 745; Enos v. Marsh, 769 F.2d 1363, 1372 (9th Cir. 1985). Detailed analysis is only required where impacts are likely. Izaak Walton League of America v. Marsh, 655 F.2d 346, 377 (D.C. Cir. 1981). And, risks or effects need not be quantified where current assessment techniques do not provide a meaningful basis for quantification (Limerick Ecology Action, 869 F.2d at 743 (emphasis added)) or when the effects are too uncertain to be reliably quantified (Trout Unlimited v. Morton, 509 F.2d 1276, 1286 (9th Cir. 1974); see Town of Norfolk, 761 F. Supp. at 887-88). Therefore, there is no requirement under NRC regulations or NEPA that the Applicant determine the cumulative quantitative risk to the public from the ISFSI and other facilities in Tooele County and this subcontention must be dismissed.

J. Castle Rock Contention 10: Retention Pond.

1. The Contention

Castle Rock alleges in Contention 10 that:

> The Application, including the ER, is defective and therefore raises public health and safety risks because it does not adequately address the potential of overflow and groundwater contamination from the retention pond and the environmental hazards created by such overflow.

Castle Rock Petition at 44. The asserted bases for the contention are set forth in two pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated, as follows incorporating the specific allegations in its bases:

> The Application, including the ER, is defective and therefore raises public health and safety risks because it does not adequately address the potential of overflow and groundwater contamination from the retention pond and the environmental hazards created by such overflow, in that
>
> a) The ER fails to discuss potential for overflow and therefore fails to comply with 10 C.F.R. Part 51.
>
> b) ER is deficient because it contains no information concerning effluent characteristics and environmental impacts associated with seepage from the pond in violation of 10 C.F.R. § 51.45(b) and § 72.126(c) & (d).
>
> c) The ER should address the applicability of the Utah Groundwater Protection Rules, which apply specifically to facilities such as the retention pond and generally require that such ponds be lined.

2. Applicant's Response to the Contention

As described below, Castle Rock's Contention 10 fails to comply with the amended Rules of Practice and must be rejected.

a) Potential for Overflow from the Pond

The retention pond is designed to collect runoff from the site for a 100 year-storm event. See ER Section 4.2.4. Storm water storage requirements are conservatively based on the 100-year, 24-hour rainfall as recommended in 40 C.F.R. Part 122, NPDES General Permit Requirements for Storm Water Discharges Associated with Industrial Activity.

Id. Under these design conditions, there will be no overflow of the retention pond. Since the design of the retention pond assures no overflow for the 100-year storm event, the overflow postulated by the contention is the kind of remote event that need not be considered under NEPA.

Surface hydrology of the site is described in SAR Section 2.4 and subsurface hydrology is described in SAR Section 2.5. The storm water collected in the retention basin will be surface runoff from the site and will not contain effluents. ER Section 2.5. ER Section 4.2.2 indicates that surface runoff is uncontaminated and will not adversely affect vegetation or wildlife. Also, as stated in SAR Section 2.5.3, potential contamination of groundwater is not applicable since the depth to groundwater at the site is substantially removed from any activity at the site finished grade. Castle Rock ignored these evaluations and provided no supported contrary view.

Castle Rock's Contention concerning potential for overflow from the pond must be rejected. The Applicant addressed this issue in detail in both the SAR and the Environmental Report. A contention cannot ignore it and still be acceptable. See Section II.C.2. supra.

b) Effluent Characteristics and Environmental Impacts Associated with Seepage

Castle Rock does not present any credible mechanism for the surface runoff to become radioactively contaminated. Hence, addressing environmental impacts associated with seepage from the pool is not appropriate and not required under the regulations. The facility is only required to provide effluent systems "as appropriate for the handling and

storage system." 10 C.F.R. § 72.126(c). As described in detail in Applicant's response to Castle Rock's Contention 11, the PFSF handling and storage systems are designed to preclude surface water runoff at the PFSF from any radioactive effluents (SAR Sections 6.3, 6.4 and 6.5). Also, the Environmental Report states that the nature and form of the material stored (spent fuel rod assemblies) and the method of storage (dry casks) precludes the possibility of a liquid contaminate spill. ER Section 2.5.6. Hence, discussion of potential contamination of the groundwater and seepage from the pond is not applicable.

Castle Rock's contention must be rejected both because it does not provide a credible mechanism that could cause contamination of the surface water runoff, and because it advocates stricter requirements than are imposed by the regulations. See Section II.B. supra.

c) Applicability of Utah Groundwater Protection Rules

Castle Rock's contention that the Utah Groundwater Protection Rules should be discussed in the Environmental Report is incorrect. The storm water retention pond (which will be used solely for collecting storm runoff) is exempted from the State's individual discharge permit requirement. See Applicant response to Contention T referencing Utah Administrative Code R317-6-6.2 (exempting detention basins, catch basins and other facilities used for collecting or conveying storm water).

Since the Utah Groundwater Protection Rules do not, as a matter of law, apply to the retention pond, there is no basis for a contention aimed at requiring a discussion of those rules in the Groundwater Report.

K. Castle Rock Contention 11: Radiation and Environmental Monitoring

1. The Contention

Castle Rock alleges in Contention 11 that:

> The Application poses undue risk to the public health and safety and fails to comply with 10 C.F.R. § 72.22, § 72.24 and § 72.126 because it fails to provide for adequate radiation monitoring necessary to facilitate radiation detection, event classification, emergency planning, and notification, including systematic baseline measurements of soils, forage, and water either near the PFSF site, or at Petitioners' adjoining lands.

Castle Rock Petition at 45. The asserted bases for the contention are set forth in three pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its bases:

> The Application poses undue risk to the public health and safety and fails to comply with 10 C.F.R. § 72.22, § 72.24 and § 72.126 because it fails to provide for adequate radiation monitoring necessary to facilitate radiation detection, event classification, emergency planning, and notification, including systematic baseline measurements of soils, forage, and water either near the PFSF site, or at Petitioners' adjoining lands in that:
>
> a) PFS has taken no background radiological samples of nearby vegetation and groundwater.

b) PFS has provided no radioactive effluent monitoring system to detect radioactive contamination in surface runoff water that collects in a retention pond on the PFSF site.

2. Applicant's Response to the Contention

Castle Rock raises two issues in Contention 11. The general assertion that radiation monitoring provided by the Application is inadequate to facilitate "radiation detection, event classification, emergency planning, and notification" is not explained, supported, or addressed in any way by the bases for the contention, and is therefore far too generalized and unsupported to establish a litigable contention in its general form. The role played by radiation monitoring with respect to radiation detection is discussed extensively at SAR 7.1-1 to 7.1-4; 7.3-16 to 7.3-17. Similarly, the role of radiation monitoring with respect to event classification is discussed at EP 2-7 to 2-16, emergency planning at EP and notification at EP 5-1 to 5-3. Castle Rock does not take issue with the radiation monitoring program described there except with respect to the two specific issues raised in the bases, background radiological samples and effluent monitoring of surface runoff collected in a retention pond, which are addressed below.

a) No Background Radiological Samples of Vegetation and Groundwater

As set forth above, Castle Rock contends that the License Application is deficient because PFS has taken no background radiological samples of nearby vegetation and groundwater. Castle Rock's assertion must be dismissed for failure to provide a sufficient basis to establish a litigable contention, as required by 10 C.F.R. § 2.714(b).

The only regulatory basis cited by Castle Rock in support of this subcontention is 10 C.F.R. § 72.126(c). Castle Rock Petition at 46-47. This provision is, however, inapplicable here. As discussed further in section b), infra, 10 C.F.R. § 72.126(c) requires systems for "effluent and direct radiation monitoring," "[a]s appropriate," during "normal operations and under accident conditions" at an operating ISFSI. 10 C.F.R. § 72.126(c) (emphasis in original). Thus, this regulation does not require taking background radiological samples prior to licensing of an ISFSI. Castle Rock provides no other regulatory basis for its contention.

The Applicant's SAR has determined that the operation of the PFSF will have no effect on nearby vegetation or groundwater because there are no liquid or gaseous radioactive effluent releases from the PFSF. See SAR at 7.3-17, 7.6-2. Solid low level waste ("LLW") generated at the PFSF is collected, packaged, and temporarily stored in a holding cell in the Canister Transfer Building for shipment to an offsite LLW disposal facility. Id. at 7.6-2. There are no credible scenarios in which radioactive effluents would be released from the PFSF. See ER at 6.2-1. Castle Rock's contention does not challenge the validity of these determinations and certainly provides no basis for any challenge.

Because there are no radioactive effluents from the PFSF, there is no radiological effect on nearby vegetation and groundwater and therefore there is no reason to perform background radiological samples on nearby vegetation and groundwater. The Commission's regulation on environmental reports for ISFSIs, 10 C.F.R. § 51.61, requires the report to include the information specified in 10 C.F.R. § 51.45 and

Subpart E of 10 C.F.R. Part 72. Nothing in Subpart E of 10 C.F.R. Part 72 requires background radiological samples of vegetation and groundwater near an ISFSI. 10 C.F.R. § 51.45 requires that the environmental report "considers and balances the environmental effects" of the ISFSI. See 10 C.F.R. § 51.45(c) (emphasis added). As discussed above, the PFSF design and operation is such that the PFSF will have no environmental effects on nearby vegetation or groundwater. Castle Rock's contention neither contradicts nor challenges this determination. See generally, Castle Rock Petition at 45-47. Further, Castle Rock has not put forth any mechanism whatsoever that would show any environmental effects on nearby vegetation or groundwater. Rather, Castle Rock's petition acknowledges that the PFSF is "expected to be very clean." Id. at 47.

Castle Rock's contention provides no basis for its assertion that the License Application is deficient because PFS has taken no background radiological samples of nearby vegetation and groundwater. Castle Rock's contention does not provide any regulatory support for its assertion that PFS must take background radiological samples of nearby vegetation and groundwater. Nor does Castle Rock's contention identify any credible mechanism by which the operation of the PFSF would have any environmental effects on nearby vegetation and groundwater. Castle Rock's contention must therefore be rejected for failure to provide a sufficient basis to establish an litigable contention under the requirements in the Commission's regulations. 10 C.F.R. § 2.714(b)(2).

b) No Radioactive Effluent Monitoring System for Retention Pond

As set forth above, Castle Rock contends that the License Application is deficient because it provides no radioactive effluent monitoring system to detect radioactive contamination in surface runoff water that collects in the retention pond.[81] Castle Rock's assertion must be rejected as a contention that advocates stricter requirements than are imposed by the Commission's regulations, and is therefore an impermissible collateral attack on the Commission's regulations. 10 C.F.R. § 2.758. See also Section II.B. supra at 5-7.

The Contention is based on Castle Rock's incomplete reading of the Commission's regulations regarding effluent radiation monitoring systems. See 10 C.F.R. § 72.126(c). Castle Rock's contention asserts that PFSF is required to perform effluent monitoring for a surface runoff retention pond because "the language of § 72.126(c) . . . states that 'effluent [monitoring] systems must be provided.' (emphasis added)." See Castle Rock Petition at 46-47 (emphasis in original). Castle Rock's reading of the Commission's regulation is incorrect and must be rejected because it is both incomplete and taken out of context. The complete requirement reads as follows:

> (c) Effluent and direct radiation monitoring. (1) As appropriate for the handling and storage system, effluent systems must be provided. Means for measuring the amount of radionuclides in effluents during normal operations and under accident conditions must be provided for these systems. A means of measuring the flow of the diluting medium, either air or water, must also be provided.

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[81] The retention pond collects and drains surface water runoff from the PFSF site. See ER at 4.2-4. The retention pond is designed to accommodate the surface water runoff from a 100-year storm event. Id. Water collected in the retention pond dissipates by evaporation and percolation into the subsoils. Id.

10 C.F.R. § 72.126(c) (emphasis in original). The text of the regulation makes clear on its face that effluent radiation monitoring systems need only be provided "as appropriate for the handling and storage system," not absolutely in every case, as Castle Rock implies through its incomplete quotation from the regulations. Castle Rock has provided no basis for why such monitoring is appropriate in this case.

Because there is no credible mechanism for the surface runoff addressed in Castle Rock's contention to become radioactively contaminated, an effluent monitoring system for the surface water retention pond is not "appropriate," and not required under the Commission's regulations. No radioactive liquid wastes are generated at the PFSF. See SAR at 7.6-3. The storage system designs for the PFSF use only seal welded metal canisters to preclude any radioactive effluents from the canister internals. See id. at 7.1-5, 7.5-4. The License Application states that

> Under normal and off-normal conditions of transport, handling, storage, and removal offsite, the potential does not exist for breach of the canister and release of radioactive material associated with the spent fuel from inside the canister. . . . [t]here are no credible scenarios that release effluents.

ER at 6.2-1. The storage casks themselves are monitored for surface contamination in the Canister Transfer Building, and decontaminated in the unlikely event that they pick up any removable contamination in the event of an off-normal condition, such as a canister mishandling event. See SAR at 6.4-2. The storage casks are only moved outside of the Canister Transfer Building for storage after a contamination survey determines they are free of removable contamination. Id. Thus, "[d]uring spent fuel storage, no releases of

any type of radioactive material occur. Therefore, there are no radiological waste impacts from the storage of spent fuel." Id. at 6.5-2. Because there are no releases of any type of radioactive material from spent fuel storage, surface water runoff from the PFSF storage area cannot contain any radioactive effluents. Castle Rock has provided no information that would support a contrary view.

As described in detail in the SAR, see, e.g. §§ 6.3, 6.4, 6.5, the PFSF handling and storage systems are therefore designed to preclude surface water runoff at the PFSF from containing any radioactive effluents. The facility is required to provide effluent monitoring systems only "as appropriate for the handling and storage system." 10 C.F.R. § 72.126(c). Because of the handling and storage system design of the PFSF, such a system is not "appropriate "for the surface water retention pond on the PFSF site. Castle Rock's contention neither addresses, nor challenges the validity of, the discussion of radioactive effluents from the PFSF in the License Application. Castle Rock's contention puts forth no mechanism whatsoever through which the surface water runoff collecting in the retention pond could have radioactive contamination, nor any discussion of why an effluent monitoring system would be "appropriate" under such circumstances.

Castle Rock's assertion that the regulations require "that 'effluent [monitoring] systems must be provided'" in all cases, regardless of whether they are "appropriate" or not, goes beyond the scope of the Commission's regulations. A contention which advocates stricter requirements than are imposed by the regulations is an impermissible collateral attack on the Commission's rules and must be rejected. See Section II.B. supra at 5-7.

L. Castle Rock Contention 12: Permits, Licenses and Approvals

1. The Contention

Castle Rock alleges in Contention 12 that:

> The Application violates NRC regulations and NEPA because the ER fails to address adequately the status of compliance with all Federal, State, regional and local permits, licenses and approvals required for the proposed PFSF facility. See, e.g., 10 C.F.R. §§ 51.45(d) and 51.71(d).

Castle Rock Petition at 47. The asserted bases for the contention are set forth in 4 pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its basis:

> The Application violates NRC regulations and NEPA because the ER fails to address adequately the status of compliance with all Federal, State, regional and local permits, licenses and approvals required for the proposed PFSF facility (see, e.g., 10 C.F.R. §§ 51.45(d) and 51.71(d)) in that:
>
> a) The ER does not contain a list of all permits, etc. which must be obtained as required by 10 C.F.R. § 51.45(d).
>
> b) The ER fails to include a discussion of the status of compliance with applicable environmental quality standards and requirements as required by 10 C.F.R. § 51.45(d) in that the (i) discussion of the Army Corps of Engineers permitting requirements for construction along the new corridor is inadequate; (ii) the discussion of requirements at the Site is inadequate and (iii) the conclusory sentence that no air quality permitting requirements apply is inadequate.
>
> c) Section 9.2 of the ER discussing Utah permitting requirements is inadequate.

d) Sections 4.1.3 and 4.2.3 of the ER concerning Utah air quality permits are inadequate.

e) ER discussion of widening Skull Valley Road is inadequate.

2. Applicant's Response to the Contention

a) List of Permits

Castle Rock claims that the Environmental Report is inadequate in that it does not contain a "list" of all permits, licenses and approvals "which must be obtained" as required by 10 C.F.R. § 51.45(d). Castle Rock Petition at 47. This contention must be rejected for ignoring relevant information in the application and for lack of basis.

This subcontention appears to be based on a mistaken belief that this regulation requires a listing of required permits and approvals in tabular form, for Chapter 9 of the Environmental Report does set forth, agency by agency, the approvals that will be required to be obtained prior to construction or operation of the facility, along with the status of compliance with those approvals. Section 9.1 lists the NRC, Department of Interior (DOI), U.S. Fish and Wildlife Service (USFWS), Bureau of Land Management (BLM), Bureau of Indian Affairs (BIA), Environmental Protection Agency (EPA), U.S. Army Corps of Engineers (COE) and Department of Transportation (DOT), as federal agencies from which the Applicant must obtain various approvals. These approvals are clearly specified in Chapter 9 and include approval of the lease between the Applicant and the Skull Valley Band of Goshute Indians, approval of the Applicant's LA, ER and SAR by NRC and approval of a storage system under Part 72 and a transportation cask under Part 71, among others.

Thus, Chapter 9 of the Environmental Report provides a listing, along with a discussion within the list, of the required environmentally related permits, licenses and approvals that typically are required for a project of this magnitude and a status of whether the PFSF is required to obtain them. Many of the permits that could apply are not required because the project is located on an Indian reservation, which is not subject to state and local laws, or because the project does not require Clean Air Act and related permits for the reasons stated below. Although the list of required permits and approvals does not appear in tabular form, as Castle Rock appears to suggest it should, no such requirement is found in 10 C.F.R. § 51.45(d). Because Castle Rock mistakenly claims that the Applicant failed to address a relevant issue in its Environmental Report, its contention must be dismissed. See, *e.g.*, Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 247-48 (1993).

This contention must also be dismissed because it fails to set forth an adequate basis. Nowhere does Castle Rock allege that there are specific permit requirements that the Applicant's Environmental Report neglects to address; Castle Rock's challenge to the information contained in the Environmental Report goes to the format rather than the substance of that document. Having failed to come forward with any facts to support a challenge that the Applicant has failed to address specific permit requirements, this contention must be dismissed for lack of adequate basis.

b) Status of Compliance

Castle Rock also claims that the Environmental Report fails to include a discussion of the status of compliance with applicable environmental quality standards and requirements as required by 10 C.F.R. § 51.45(d). Castle Rock Petition at 47. Castle Rock claims that the Environmental Report "merely mentions a number of permitting requirements that might apply; the ER provides no critical facts necessary to determine whether such requirements do apply and, if so, what, if anything, is being done to comply with them, or whether the Application does comply with those requirements." Castle Rock Petition at 47, 48. Castle Rock specifically contends that the discussion of required permits in the Environmental Report is inadequate in three respects. These are (i) the discussion concerning Dredge and Fill permits for new construction along the transportation corridor; (ii) the discussion of applicable Clean Water Act permits required for the proposed ISFSI facility; and (iii) the discussion of permitting requirements under the Clean Air Act. As discussed below, Castle Rock in each instance ignores relevant information in the Environmental Report and this contention must be dismissed.

First, Castle Rock claims that "Section 9.1.3 states that the U.S. Army Corps of Engineers must be requested to issue a so-called Dredge & Fill Permit under Section 404 of the Federal Clean Water Act ("CWA") if new construction along the transportation corridor disturbs streams and wetlands." Castle Rock Petition at 48. According to Castle Rock, this "does not comply with the Environmental Report and NEPA requirements" in that "[t]ransportation corridors must be identified and facts about streams and wetlands must be analyzed before the Environmental Report can satisfy NRC/NEPA

requirements." This contention ignores relevant information in the Environmental Report and exceeds the regulatory requirements and must therefore be dismissed.

The environmental effects of site and transportation corridor construction and operation are discussed in Chapter 4 of the Environmental Report. Section 4.1.4 specifically discusses effects on hydrological resources. That section, ignored by Castle Rock, states that "[t]here are no perennial streams at or near the PFSF and its access road . . . . Therefore, there will be no impact on area hydrology due to construction of the facility and its access road." ER at 4.1-10. Further, Section 4.3.2 of the Environmental Report expressly addresses environmental impact of the widening of the road as follows:

> Road expansion will require the permanent alteration of approximately 29 acres to accommodate the new wider lanes and shoulders . . . . In general, the small amount of road-side vegetation lost will be a minor impact as much of this land is composed of common habitat types, such as desert shrub/saltbush . . . .

ER at 4.3-2. The section goes on to discuss "[s]everal specific environmentally sensitive areas [that] have been identified along the transportation corridor and [that] may require special consideration during construction activities." ER at 4.3-2, 2-3. Thus, this contention must be dismissed for ignoring information in the Application and a concomitant lack of basis.

Second, Castle Rock suggests that the Environmental Report's discussion of the permitting authority of the Skull Valley Band under the Clean Water Act is inadequate. According to Castle Rock "[i]f the tribe has not been granted CWA authority by the . . . U.S. Environmental Protection Agency . . . the ER must clearly state this fact and identify

what EPA and state permitting requirements apply and what, if anything, is being done by PFS to comply with them." Castle Rock Petition at 48. Castle Rock ignores, however, that the Environmental Report does exactly that on the same page of the report. It states: "There are no stream or wetland impacts associated with the development of the facility site." ER at 9.1-4. Castle Rock does not claim that this is an incorrect determination nor does it supply any facts or expert opinion or supporting documents that would support a challenge to this determination.

Third, Castle Rock claims that the "one-sentence, conclusory statement that no [air] permitting requirements apply . . . is woefully inadequate." It claims that none of the analysis necessary to determine whether air permitting requirements apply is set forth and as a result Castle Rock "cannot assess the reasoning and data underlying PFS's conclusions." Castle Rock Petition at 48, 49.

Again Castle Rock ignores relevant information in the Environmental Report. The analysis of impact of the Facility and related construction is analyzed in other sections of the Environmental Report. Specifically, Section 4.1.3 of the Environmental Report analyzes the pollutant emissions from construction of the site and summarizes the results of that analysis in Tables 4.1-4, and 4.1-5. These tables, which provide emissions estimates, indicate that the point sources on the PFSF will emit significantly less than the 100 ton per year threshold for the Title V program. Thus, Castle Rock's contention that the Applicant's analysis is "woefully inadequate" of air permitting requirements is simply incorrect. Castle Rock has presented no facts or expert testimony to challenge the

information from these tables; Castle Rock's failure to provide a basis for its contention must result in the dismissal of this contention.

In sum, Castle Rock is required to do more than make bald, conclusory allegations concerning the adequacy of the Environmental Report. Castle Rock "must make a minimal showing that material facts are in dispute . . ." Connecticut Bankers Ass'n v. Board of Governors, 627 F.2d 245, 251 (D.C. Cir. 1980). Castle Rock has ignored the Applicant's facts and analysis in the Environmental Report and has presented no facts or expert testimony to contest them or to challenge those conclusions. Therefore, this subcontention must be dismissed for lack of an adequate basis.

c) Utah Permitting Requirements

Castle Rock claims that "Section 9.2 of the ER (addressing State of Utah permitting requirements) " is inadequate because it "uses the word 'may' in referring to which state permitting requirements are applicable to the PFSF project leaving 'up in the air' the question of what state permitting requirements actually apply." Castle Rock Petition at 49. According to Castle Rock, "there are very few solid facts allowing the reader to understand the permitting status of the Application. Thus, we cannot assess the reasoning and data underlying PFS's conclusions." Id.

This Contention must be dismissed for lack of a legal and factual basis. Castle Rock cites no legal authority in support of its contention that the Applicant's analysis of the state permitting requirements is inadequate. Castle Rock generically states that the Applicant has provided "very few solid facts" but fails to specify what additional facts are

required to be provided or why the facts provided are inadequate. Furthermore, Castle Rock does not challenge the statement in the ER that "[t]he permitting of the PFSF located on the Skull Valley Indian Reservation is governed by federal and tribal law. Applicable Utah laws only pertain to construction activities outside of the Reservation involving the transportation corridor." ER at 9.2-1.

Further, because it is not yet clear which mode of transportation will be utilized, (*i.e.*, rail spur or heavy haul truck), it is premature to attempt to determine what permits will be required. There is no requirement that permits be obtained or precisely identified in scope and nature at the time of filling a license application with the NRC. NRC case law strongly supports the conclusion that the application for and procurement of permits and licenses may proceed simultaneously with the consideration of the proposal by the NRC. See, Applicant's response to Utah Contention T and cases cited therein.

Thus, contrary to Castle Rock's implicit underlying assumption, the Applicant is not required to have determined at this preliminary stage of the proceeding what permitting requirements will apply. It is sufficient to have considered, in the context of alternatives that are still being weighed, what permitting requirements may apply. Because it is not yet been decided which mode of transportation will be utilized, (*i.e.*, rail spur or heavy haul truck), it is premature to attempt to determine exactly what permits will be required.

d) Utah Air Quality Permits

Castle Rock claims that the discussion in Sections 4.1.3 and 4.2.3 of the Environmental Report concerning Utah air permitting requirements is inadequate. Castle Rock Petition at 48. According to Castle Rock, PFS "cites to a number of Utah Division of Air Quality ('DAQ') rules with the apparent assumption that they do apply to the construction of the PFSF. If DAQ rules apply . . . it is clear that prior to the commencement of construction a DAQ approval order must be obtained." Castle Rock Petition at 49.

This contention must be dismissed for lack of an adequate basis because the State of Utah Division of Air Quality (DAQ) rules are not enforceable on the Skull Valley reservation. As set forth in the response to Utah Contention T, no state air quality order or approval is required here because the State has no jurisdiction or authority to require such an order for activities on the Skull Valley reservation, absent an express delegation from Congress, which has not been provided.

Further, as indicated in the Environmental Report, Castle Rock completely ignores the discussion in Sections 4.1.3 and 4.2.3 of the Environmental Report of air emissions produced by the PFSF during construction and operation of the facility. Also ignored are the data in Table 4.1-4 which lists the specific pollutants and their estimated emission rate in tons/month. Castle Rock does not challenge the Applicant's assertion that "[t]he operation of the PFSF is not expected to have any measurable impact on the local meteorology or air quality." ER at 4.2-3. Nor does Castle Rock challenge the analysis provided in § 4.1.3 that preliminary analysis of "[c]onstruction related pollutant emissions . . . indicate that the estimated pollutant concentrations at Skull Valley Road

and at the nearest residences are all below the ambient air quality standards." ER at 4.1-9, 10.

Castle Rock has provided no facts or expert opinion to challenge these conclusions or to support its assertion that "it is clear" that a DAQ approval order would be required assuming State law were applicable. This failure to comply with the requirements of 10 C.F.R. § 2.714(b)(2)(ii) is also grounds for dismissal.

Thus, this contention must be dismissed for lack of basis and materiality. Even if proven, this contention "would not entitle [the] petitioner to relief," 10 C.F.R. § 2.714(d)(2)(ii), since Applicant's proposed activities fall outside the jurisdiction of the DAQ and therefore, DAQ permits are not applicable. See also Section II.B. supra.

e) Widening Skull Valley Road.

Castle Rock's Petition states that the "Environmental Report mentions that the Skull Valley Road may need to be widened to accommodate the large trucks proposed for hauling the spent fuel to the PFSF site," but fails to discuss that "two critical approvals are needed: Those of Castle Rock and Skull Valley Co." who own the land on both sides of this highway. Castle Rock Petition at 49.

This contention must be dismissed for failure to provide an adequate factual basis. Castle Rock asserts that it owns land on both sides of the highway, and that the Applicant will be required to obtain approval from Castle Rock in order to widen the Skull Valley Road. But Castle Rock has failed to provide an adequate factual basis for its contention that expansion of the existing roadway would require additional land acquisition from

Castle Rock. Castle Rock's only assertion is that it owns much of the land on either side of the road. Id. Castle Rock provides no facts or expert opinion to suggest that additional right-of-way will be necessary to expand the roadway. In short, this subcontention amounts to nothing more than a mere expression of Castle Rock's opinion and is therefore inadmissible.

M. Castle Rock Contention 13: Inadequate Consideration of Alternatives.

1. The Contention

Castle Rock alleges in Contention 13 that:

> The Application violates NRC regulations and NEPA because the ER fails to give adequate consideration to alternatives, including alternative sites, alternative technologies, and the no-action alternative. See 10 C.F.R. § 51.45(c).

Castle Rock Petition at 50. The asserted bases for the contention are set forth on pages 50-52. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its bases:

> The Application violates NRC regulations and NEPA because the ER fails to give adequate consideration to alternatives, including alternative sites, alternative technologies, and the no-action alternative, see 10 C.F.R. § 51.45(c), in that:
>
> a) There is no discussion in the ER on the required topics of environmental effects and impacts, economic, technical and other costs and benefits of the alternatives.

b) The evaluation and comparison of the no build or no action alternative is inadequate.

c) The analyses of alternatives ignores every potential negative factor with respect to the PFSF. Such an analysis must include

(i) the environmental and safety benefits associated with maintaining and expanding a decentralized, onsite storage system;

(ii) the environmental and safety impacts and risks associated with the proposed privately operated, centralized system,

(iii) the state-by-state, plant-by-plant facts which create the need PFS asserts is present for moving the spent fuel to another location;

(iv) the environmental impacts and safety hazards associated with moving so many casks from various locations across the country to a centralized location;

(v) the environmental benefits of a combination of expanded onsite storage and regional ISFSIs;

(vi) the heightened safety hazards associated with moving such a large quantity of spent fuel to Utah when the transportation corridors will be contested for the 2002 Olympic Games and subsequent activities.

d) The ER fails to include an analysis of the prospect of a legislative solution.

2. Applicant's Response to the Contention

a) Inadequate Environmental Evaluation of Alternatives

Castle Rock alleges that the Applicant has violated NRC regulations, specifically 10 C.F.R. § 51.45(c), and NEPA because the Environmental Report fails to adequately consider the environmental effects of constructing the ISFSI, the environmental impacts

of alternatives to that action, and alternatives available for reducing or avoiding adverse environmental effects. In particular, Castle Rock asserts that the Environmental Report fails to discuss the relative "environmental effects and impacts, economic, technical and other costs and benefits" among the Skull Valley site, the NEW Corporation alternative site and any other potential sites. Castle Rock Petition at 50-51.

Subsection (c) of § 51.45 states that

> The environmental report shall include an analysis that considers and balances the environmental effects of the proposed action, the environmental impacts of alternatives to the proposed action, and alternatives available for reducing or avoiding adverse environmental effects . . . . [T]he analysis in the environmental report should also include consideration of the economic, technical, and other benefits and costs of the proposed action and of alternatives. . . . The environmental report should contain sufficient data to aid the Commission in its development of an independent analysis. 10 C.F.R. § 51.45(c).

This contention must be dismissed for two reasons. First, Castle Rock mistakenly claims that Applicant's ER fails to address the required topics of discussion mandated by the above regulation. Second, Castle Rock fails to provide any basis for its generalized allegation that the Applicant has not complied with the requirements of §51.45(c). Specifically, Castle Rock fails to explain in what respects the information contained in the application is insufficient to "aid the Commission in its development of an independent analysis." §51.45(c).

The first ground for dismissal is that Castle Rock completely ignores the discussion and analysis in the Environmental Report that explains the process by which

the Applicant selected among 38 candidate sites (including the NEW Corporation site identified by Castle Rock) and narrowed that preliminary list of choices to the proposed primary and alternative sites. See §8.1.3 of the ER, "Siting Alternatives," Table 8.1-1, "Potential Host Sites," Table 8.1-2, "Site Selection Questionnaire," and Table 8.1-3, "Evaluation Criteria." The process included consideration of the relevant environmental effects, economic, technical, and other considerations, including political factors.

Similarly, Castle Rock ignores the discussion and analysis in the Environmental Report that explains the process by which the Applicant selected the multi-purpose canister technology for use at the PFSF. See ER §8.2, "Facility Design Alternatives," which describes the "five types of system technologies available or under development for the dry storage of spent nuclear fuel." Id. at 8.2-1. That section describes each alternative, its concomitant health, safety, environmental, and financial advantages and disadvantages, and the sequence of operations for each identified alternative system.

Thus, contrary to Castle Rock's assertion that the environmental, technical, economic and other factors identified in §51.45(c) were not considered in the Applicant's site selection, the Environmental Report shows that these factors were considered. See ER at 8.1-2. A contention such as this one, that mistakenly claims that the applicant failed to address a relevant issue in the application must be dismissed. See, e.g., Georgia Power Company (Vogtle Electric Generating Plant, Units 1 and 2), LBP-91-21, 33 NRC 419, 424 (1991).

b) "No-Action" Alternative

Castle Rock claims that the discussion of the "no-action" alternative in the Environmental Report "focuses almost exclusively on the costs to be incurred by some power companies if . . . the centralized ISFSI is not built when and where [the Applicant] proposes." Castle Rock Petition at 51. Once again, Castle Rock ignores relevant information in the Environmental Report, which considers the "no action" alternative and discusses the consequences that would result from a decision not to build the facility. Those consequences include the premature shutdown of currently operational commercial nuclear power plants and delayed decommissioning and increased maintenance expenses for permanently shutdown reactors. Additional adverse environmental consequences would likely result from the proliferation at plant sites of onsite ISFSIs that lack standardization and which would thereby increase the complexity and cost of preparing and shipping spent fuel to a permanent federal repository and which would increase the decommissioning burden for utilities. ER at 8.1-3.

The "no-action" alternative means that the project will not take place. See Council on Environmental Quality, Forty Most Asked Questions Concerning CEQ's National Envtl. Policy Act Regulations, 46 Fed. Reg. 18,026, Q.3. (Mar. 23, 1981). In the context of a licensing decision, there are two alternatives: to grant the license or to deny the license. The costs and benefits of granting the license will be reversed if the license is denied. (See, e.g., South Louisiana Environmental Council, Inc. v. Sand, 629 F.2d 1005, 1017 (5th Cir. 1980), stating that ". . . obviously, the adverse environmental effects would not take place were the project to be stopped . . ."). Since the Applicant has comprehensively identified and evaluated the environmental impacts of proceeding with

the proposed action[82] it has *ipso facto* identified the benefits of not proceeding. Once again, Castle Rock has ignored relevant information in the Environmental Report and has merely advocated additional discussion of issues. Such a contention is not admissible and must be dismissed. Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), LBP-93-23 38 NRC 200, 246 (1993).

c) Ignoring Potential Negative Factors

Castle Rock also claims that the analysis in the Environmental Report is "utterly one sided and creates an obvious bias . . . in favor of the Skull Valley alternative by ignoring every potential negative factor." The contention then lists the environmental impacts that it claims should have been considered, such as those associated with (i) "maintaining and expanding a decentralized, on-site storage system; (ii) the environmental and safety impacts and risks associated with the proposed privately operated, centralized system; (iii) the state-by-state, plant-by-plant facts which create the need [the Applicant] asserts is present for moving the spent fuel to another location . . . ; (iv) the environmental impacts and safety hazards associated with moving so many casks from various locations across the country to a centralized location . . . ; (v) the environmental benefits of a combination of expanded on-site storage and regional ISFSIs as opposed to the national, centralized approach to the environmental benefits of a government-sponsored monitored retrievable storage facility, . . . and (vi) the heightened

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[82] See Chapter 4 of the Environmental Report. Also, Chapter 5 of that report addresses the environmental effects of accidents and Chapter 7 discusses economic and social effects of installation, construction and operation.

safety hazards associated with moving such a large quantity of spent nuclear fuel to Utah when the transportation corridors will be congested for the 2002 Olympic Games and subsequent activities." Castle Rock Petition at 51.

This part of the contention must also be rejected. Again, Castle Rock ignores information in the Environmental Report that directly addresses its claims.

(i) Decentralized, on-site Storage System

The contention's first claim, that the Applicant should evaluate the alternative of maintaining and expanding a decentralized on-site storage system, is addressed at §1.2 of the Environmental Report, entitled, "Need for the Facility," which discusses the economic and regulatory impediments to continued on-site storage, as well as the shortage of available capacity in on-site spent fuel pools--a shortage which is likely to impede the continuing operation of commercial nuclear power plants, hamper their future decommissioning, and significantly raise the costs of that process. Because this contention mistakenly claims that the Applicant failed to address a relevant issue in the application, it must be dismissed. See, e.g., Rancho Seco, at 247-48. Furthermore, the contention amounts to nothing more than an assertion that the Applicant should have considered the alternative of maintaining and expanding a decentralized on-site storage system. As such, it must be dismissed. The NRC Rules of Practice are clear that a statement "that simply alleges that some matter ought to be considered" does not provide a sufficient basis for an admissible contention. Id. at 246.

(ii) Privately Operated, Centralized System

Petitioner also demands that the alternatives discussion "objectively include the environmental and safety impacts and risks associated with the proposed privately operated, centralized system." Castle Rock Petition at 51. Again, Petitioner completely ignores the discussion of those issues in Chapter 4 of the Applicant's Environmental Report. That Chapter discusses the environmental effects of facility operation including effects on air quality, geography, land use and demography, ecological resources, hydrological resources, etc. ER §4.3. Because this subcontention mistakenly asserts that information required to be included in the LA or ER was not included, it must be dismissed. Rancho Seco at 247-48.

(iii) Nation-Wide Analysis of Need

Next, Castle Rock demands a summary of the "state-by-state, plant-by-plant facts which create the need [the Applicant] asserts is present for moving the spent fuel to another location." Castle Rock Petition at 51. This challenge to the Applicant's conclusion that there is a "need" for the facility must also be dismissed as "advocat[ing] stricter requirements than those imposed by the regulations, [and therefore amounting to] "an impermissible collateral attack on the Commission's rules." See Section II.B. supra.

Castle Rock asserts, without providing any supporting factual or legal basis, that the Applicant must provide in its statement of need for the facility, a detailed analysis for each reactor site. Castle Rock has provided absolutely no legal or factual basis to show that Applicant's analysis of need is inadequate or that its proposed far-reaching analysis

of need must be undertaken under NEPA's rule of reason. For the reasons set forth in response to Utah Contention X, this subcontention should be excluded.

(iv) Moving the Casks Across Country

Here, Castle Rock asserts that "the alternatives discussion must objectively include . . . the environmental impacts and safety hazards associated with moving so many casks from various locations across the country to a centralized location . . ." Castle Rock Petition at 51.

This subcontention must be dismissed as an impermissible collateral attack on the NRC's regulations for advocating stricter requirements than they impose. Id. The spent fuel is shipped in shipping casks which are required to comply with applicable DOT and NRC regulations. The shipping cask is a 10 C.F.R. Part 71 certified package that is required to be designed to ensure containment of any radioactive material, including any external surface contamination on a canister, and prevent release of the material to the environment. See 10 C.F.R. Part 71 Subpart E; see also SAR at 5.1-8. A challenge to the capability of a shipping cask to perform its designed and certified function is a challenge to NRC regulation.

Furthermore, Castle Rock's subcontention is also a direct challenge to the Commission's regulations in 10 C.F.R. Part 72 which expressly limit (as discussed in Applicant's Response to Utah Contention V) the evaluation of the environmental effects of transporting spent fuel to the region of the ISFSI. 10 C.F.R. §§ 72.34, 72.108.[83] The

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[83] Applicant incorporates its response to Utah Contention V, subpart a.

Commission has expressly considered in promulgating those regulations the extent to which the environmental impacts of transporting spent fuel to and from an ISFSI are to be considered, and it has determined that the transportation environmental impacts to be assessed are those "within the region" where the ISFSI will be located. Id. (emphasis added); see also, 45 Fed. Reg. 74,693, 74,695 (1980). As a result, Castle Rock's contention and its related bases, which argue that "the alternatives discussion must objectively include . . . the environmental impacts and safety hazards associated with moving so many casks from various locations across the country to a centralized location . . ." (Castle Rock Petition at 51), are barred as a matter of law from being litigated in this licensing proceeding. See Section II.B. supra.

Additionally, the environmental effects of such shipments have been evaluated using the NRC's generic determination of the environmental impact of shipping spent fuel and must similarly be rejected. See Table S-4 and the discussion of Radioactive Material Movement at § 4.7 of the Environmental Report as well as § 5.2 which discussed Transportation Accidents. Castle Rock provides no factual basis to support a challenge to the conclusion of Table S-4 that "although the environmental risk of radiological effects stemming from transportation accidents is currently incapable of being quantified, the risk remains small." Table S-4, fn. 4. Nor does Castle Rock challenge the conclusion of several other studies mentioned in section 5.2 of the Environmental Report, all of which concluded that the environmental impacts of

transportation of spent nuclear fuel are acceptable. ER at 5.2-2.[84] Castle Rock's failure to provide any basis of fact or expert testimony to challenge the Environmental Report's findings must result in a rejection of this subcontention for lack of adequate basis.

(v) Combination of Expanded on-site Storage and Regional ISFSIs

The next part of the contention asserts that Applicant must include in its "alternatives" discussion, "the environmental benefits of a combination of expanded on-site storage and regional ISFSIs as opposed to the national, centralized approach to the environmental benefits of a government-sponsored monitored retrievable storage facility, as prescribed by the NWPA." Castle Rock Petition at 51. Here, again, Petitioner ignores the entirety of that discussion in the Environmental Report. The MRS is discussed at 1.1-1 of the Environmental Report. That discussion explains that the siting and construction of the MRS, the construction of which is authorized by the NWPA, will not occur until "well beyond the 1998 deadline." Id. Therefore, a discussion of this alternative is inextricably linked to the Applicant's discussion of the need for the facility. To the extent that an MRS will not be available in the near future, the scarcity of on-site storage space makes consideration of the environmental benefits of this alternative a moot issue. The Applicant has also addressed the issue of the environmental benefits of a

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[84] For example, NUREG-0170 concluded that "[t]he radiological risk from accidents in transportation is small . . . " Likewise, NUREG/CR-4829 concluded that "at least 99.4 percent of truck and train accidents involving a spent fuel shipment will result in negligible radiological hazards which are less than those implied by the current . . . regulations." Similarly, the Environmental Assessment for the Yucca Mountain Site, performed by DOE concluded that " . . . it is very unlikely that an accident resulting in a release of radioactive material would occur and . . . evidence suggests that the consequences would not be great should such an accident occur." ER at 5.2-2, 3.

combination of expanded on-site storage and regional ISFSIs. §8.1.3.1, "Selection of Candidate Sites," discusses the consequences of building ISFSIs at sites around the country, including increasing the number of sites, increasing the number of storage technologies used, greater environmental disturbance than a single site, increased decommissioning burden, and increased complexity and cost for ultimate spent fuel disposal. ER at 8.1-3. Castle Rock does not challenge the Applicant's assessment of this alternative. To the extent that Castle Rock's references to "regional ISFSIs" is intended to refer to away-from-reactor ISFSIs, it has provided no basis or support for the availability of other sites beyond those considered by Applicant. Finally, Castle Rock's statement that this matter should be considered in the Environmental Report does not provide a sufficient basis for an admissible contention.

(vi) Congested Transportation Corridors during 2002 Olympics

Castle Rock also claims that there will be "heightened safety hazards associated with moving such a large quantity of spent nuclear fuel to Utah when the transportation corridors will be congested for the 2002 Olympic Games and subsequent activities . . . ." Castle Rock Petition at 51. This subcontention must be dismissed as an impermissible challenge to NRC regulations for the same reasons as subcontention c(iv) above.

Furthermore, this subcontention must be dismissed for lack of an adequate factual basis. Castle Rock has provided no support for its unsupported, conclusory allegation that the transportation corridors that will be used to move the fuel will be congested for the Olympic Games. It certainly is not apparent why the Olympic Games would

substantially increase traffic on the main railway or Skull Valley Road. In any event, Castle Rock provides no facts in support of its claim that congested transportation corridors will present "heightened safety hazards"; nor does it specify what those hazards would be and how they would endanger the environment or the health and safety of the public. Finally, Castle Rock specifies no other "subsequent activities" that will cause congestion of the transportation corridors. In sum, this subcontention lacks any factual bases and must be dismissed.

(vii) Legislative Solution

Castle Rock claims that since legislation is currently "moving through Congress which would address the stated concerns of PFS . . . , NEPA requires that the ER include an analysis of the prospect for a legislative solution . . ." Castle Rock Petition at 52. This contention must be dismissed for lack of an adequate legal basis. Contrary to NRC regulations (see, e.g., 10 C.F.R. §2.714(b)(2)(i)), Castle Rock cites no legal authority for requiring the Applicant to consider pending legislation. Furthermore, Castle Rock's suggestion that the Applicant evaluate "the environmental advantages of a government operated temporary, high-level nuclear waste, spent fuel facility" (Castle Rock Petition at 52) is moot, since, as the Applicant discusses in §1.2 on "Need for the Facility," many utilities are facing a near term shortage of spent fuel storage capacity and any prospects for a "government operated temporary, high-level nuclear waste spent fuel facility" (id.) are years in the future.

N. Castle Rock Contention 14: Inadequate Consideration of Impacts

1. The Contention

Castle Rock alleges in Contention 14 that:

> The Application violates NRC regulations and NEPA because the ER fails to give adequate consideration to the adverse impacts of the proposed PFSF, including the risk of transportation accidents, the risks of contamination of human and livestock food sources, the risks of contamination of water sources (including ground water contamination arising from leaching of contaminated soils), the risks of particulate emissions from construction and cement activities and similar risks. 10 C.F.R. § 72.100.

Castle Rock Petition at 52. The asserted bases for the contention are set forth in two pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its bases:

> The Application violates NRC regulations and NEPA because the ER fails to give adequate consideration to the adverse impacts of the proposed PFSF, including the risk of transportation accidents, the risks of contamination of human and livestock food sources, the risks of contamination of water sources (including ground water contamination arising from leaching of contaminated soils), the risks of particulate emissions from construction and cement activities and similar risks (10 C.F.R. § 72.100) in that
>
> a) Section 5.2 discussing transportation accidents contains no site specific information on the "effects on populations in the region" as required by the rule.
>
> b) Chapter 4 of the ER contains no meaningful evaluation of impact of unlined retention pond and other PFSF operations on surrounding subsoils and ground water.

c) The ER fails to give adequate consideration to the adverse impacts of the PFSF, including the risks of contamination of human and livestock food sources.

d) The ER fails to give adequate consideration to the adverse impacts of the PFSF, including the risks of particulate emissions from construction and cement activities.

2. Applicant's Response to the Contention

a) Effects of Transportation Accidents

Castle Rock's claims that section 5.2 of the Environmental Report contains no site specific information on the effects on population in the region as required by the rule. Castle Rock Petition at 52-53. This subcontention must be rejected for lack of bases and as an impermissible challenge to Commission regulations and generic determinations concerning the transportation of spent fuel for the reasons set forth in the Response to Castle Rock Contention 13, subpart c.(iv). The Applicant calculated the effects on population in the region in accordance with those rules and generic determinations. Contrary to the legal principles set forth in section II.B supra, Castle Rock seeks to litigate in this licensing proceeding the generic determination embedded in Table S-4. As set forth in the Response to Castle Rock Contention 13, subpart c.(iv), Castle Rock has provided no factual basis to challenge Table S-4 and this subcontention, like the previous, must likewise be rejected.

b) Effects of ISFSI Operations on Subsoil and Groundwater

Castle Rock alleges that the Environmental Report fails to give adequate consideration to "the risks of contamination of water sources (including ground water

contamination arising from leaching of contaminated soils)." Castle Rock Petition at 52. It states that the Environmental Report "contains no meaningful evaluation of the potential impact of the unlined retention pond and other PFSF operations on surrounding subsoils and ground water." Castle Rock Petition at 53.

This subcontention must be dismissed because it provides neither a "concise statement of the alleged facts or expert opinion" in its support nor "references to those specific sources and documents . . . on which the petitioner intends to rely to establish [the] facts or expert opinion" on which it bases its contention. 10 C.F.R. § 2.714(b)(2)(ii). Castle Rock refers to no facts, expert opinion, or documents to support a claim that the ISFSI will have any impact on groundwater or will contaminate the soil in any way. See Castle Rock Petition at 52-53. Moreover, it provides no basis for its unsupported allegation that the Applicant's treatment of groundwater or soil effects is inadequate. See id. The Castle Rock subcontention is utterly devoid of a factual basis, contrary to the requirements of 10 C.F.R. § 2.714(b)(2)(ii). Thus, this subcontention must be dismissed.

This subcontention must be also dismissed because it mistakenly claims that Applicant failed to address a relevant issue in the application. The Environmental Report addresses the effects of ISFSI operation on ground and surface water. See ER at 2.5-5 to 12, 4.1-10, 4.2-4 to 5, 4.3-6, 4.4-3 to 4, 4.5-1 to 2, concluding that "[o]peration of the PFSF will have no measurable offsite effects on existing groundwater quality or levels." Id. at 2.5-12. Moreover, the Environmental Report specifically addresses the flow of

water into and the evaporation and seepage of water from the retention pond. See id. at 2.5-7, 4.2-2, 4.2-4 to 5.

> Runoff from precipitation will be collected in the retention basin. Surface runoff is uncontaminated and will not adversely affect vegetation or wildlife. . . . In the immediate area of the retention basin . . . , the vegetative species composition could change to include species that occur in areas with greater root zone water availability. No adverse impacts to area vegetation would result from operation of the PFSF.

Id. at 4.2-2.

c) Risks of Contamination of Food Sources

Castle Rock alleges that the Environmental Report fails to give adequate consideration to "the risks of contamination of human and livestock food sources." Castle Rock Petition at 52.

This subcontention must be dismissed because it provides neither a concise statement of the alleged facts or expert opinion in its support nor references to specific sources and documents to establish the facts or expert opinion. Castle Rock refers to no facts, expert opinion, or documents to support a claim that ISFSI operation will contaminate human or livestock food sources in any way. See Castle Rock Petition at 52. Moreover, it provides no basis for its argument that Applicant's consideration is inadequate. See id. This subcontention too is utterly devoid of a factual basis. See also Applicant's Response to Castle Rock Contention 18.

d) Risks of Particulate Emissions from Construction Activities

Castle Rock alleges that the Environmental Report fails to give adequate consideration to "the risks of particulate emissions from construction and cement activities and similar risks." Castle Rock Petition at 52.

This subcontention must be dismissed because it provides neither a concise statement of the alleged facts or expert opinion in its support nor references to specific sources and documents to establish the facts or expert opinion. 10 C.F.R. § 2.714(b)(2)(ii). Castle Rock refers to no facts, expert opinion, or documents to support a claim that ISFSI construction or operation will pose any risks due to particulate emissions from construction activities. See Castle Rock Petition at 52. Moreover, it provides no basis for its argument that the Applicant's analysis is inadequate. See id. This subcontention as well is devoid of a factual basis and must be dismissed.

This subcontention must be also dismissed because it mistakenly claims that Applicant failed to address a relevant issue in the application. The Environmental Report addresses the impact of construction activities and particulate control:

> Dust control techniques may include watering and/or chemical stabilization of potential dust sources. Other techniques that will be used to control fugitive dust emissions include covering materials being hauled from the site by truck and by employing routine washing of trucks. Dust emissions from anticipated concrete and asphalt batch plant operations will also be mitigated through the use of enclosures, hoods, shrouds, and water sprays.

ER at 4.1-8 to 9; see also id. at Table 4.1-5.

In fact, the Environmental Report quantifies the amount of particulate matter that construction activities are expected to produce and compares it to regulatory limits. Id. at

Tables 4.1-4 and 5. Therefore, because Castle Rock has ignored this material, this subcontention must be dismissed.

O. Castle Rock Contention 15: Cost-Benefit Analysis

1. The Contention

Castle Rock alleges in Contention 15 that:

> The Application violates NRC regulations and NEPA because the ER does not contain a reasonable and legitimate comparison of costs and benefits. 10 C.F.R. § 51.45(c).

Castle Rock Petition at 53. The asserted bases for the contention are set forth in one page of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its bases:

> The Application violates NRC regulations and NEPA because the ER does not contain a reasonable and legitimate comparison of costs and benefits, 10 C.F.R. § 51.45(c), in that:
>
> a) ER Chapter 7 cost-benefit analysis is overly simplistic and fails to account for the true environmental, safety, social and economic costs associated with the proposed PFSF in Skull Valley.
>
> b) Cost-benefit analysis fails to account for the "loss of property values, economic opportunities and other business and economic losses" imposed by mere existence of PFSF.
>
> c) Chapter 7 of the ER fails to discuss applicant's financial arrangements with the Skull Valley Band which is essential to the cost-benefit analysis.

d) The Castle Rock Petitioners intend to offer evidence on true costs of the proposed facility.

2. Applicant's Response to the Contention

Castle Rock raises a number of issues under Contention 17, which we address in turn below.

a) Simplicity of the Cost-Benefit Analysis

Castle Rock asserts that the cost-benefit analysis in Chapter 7 of the ER is "overly simplistic and fails to account for the true environmental, safety, social and economic costs associated with the proposed PFSF in Skull Valley." Castle Rock Petition at 53.

In this subcontention, Castle Rock does not specify either the environmental impacts that the Applicant has allegedly not addressed nor the parts of the application that are allegedly defective. See Castle Rock Petition at 53. Castle Rock only makes a broad, general allegation that the ER's cost-benefit analysis is "overly simplistic." Id. Thus, the subcontention is nonspecific and must be dismissed. The Applicant treats Castle Rock's other, more specific points, below.

Moreover, this subcontention must be dismissed because it does not include "sufficient information . . . to show that a genuine dispute exists with the applicant on a material issue of law or fact." 10 C.F.R. § 2.714(b)(2)(iii). It does not provide the "supporting reasons for the petitioner's belief" that the ER's cost-benefit analysis is overly simplistic. Id. In this subcontention, Castle Rock does not say why the analysis is overly simplistic. Castle Rock Petition at 53. If a petitioner believes that an application has omitted required material, it must "explain why the application is deficient." 54 Fed.

Reg. 33,168, 33,170 (1989) (10 C.F.R. § 2.714(b)(2), Statement of Considerations), cited with approval in Georgia Power Company (Vogtle Electric Generating Plant, Units 1 and 2), CLI-93-16, 38 NRC 25, 41 (1993). Castle Rock has the obligation to specify how the application is inadequate to demonstrate a litigable contention. It has not done so here, so this subcontention must be dismissed.

b) Property Values and Other Business and Economic Losses

Castle Rock asserts that the cost-benefit analysis in the ER is "overly simplistic" and fails to account for the true cost of the ISFSI in that it "totally fails to consider the loss of property values, economic opportunities and other business and economic losses that will be imposed on Petitioners by the mere existence of the PFSF." Castle Rock Petition at 53.

This subcontention must be dismissed because Castle Rock has provided no facts or expert opinion, together with references to specific sources and documents to establish such facts or expert opinion, to support its contention. Castle Rock provides no facts, expert opinion, or documents whatsoever to support its claim that the Applicant's ISFSI will harm property values, economic opportunities, or cause other business or economic losses. See Castle Rock Petition at 53.

c) PFS's Financial Arrangements with the Goshutes

Castle Rock alleges that the ER's cost-benefit analysis is inadequate because it "does not describe PFS's financial arrangements with the Goshutes . . . which are essential to any cost-benefit analysis." Castle Rock Petition at 53.

This subcontention must be dismissed because it overlooks relevant material submitted by the Applicant. The Environmental Report states that "[t]he direct costs of the PFSF include . . . annual costs associated with the Tribal lease." ER at 7.3-1. The total life-cycle cost of the facility is given as $1.536 billion. Id. Therefore, because this subcontention overlooks the fact that the cost of the Tribal lease has been incorporated into the total cost of the facility, the subcontention must be dismissed.

Moreover, this subcontention must be dismissed as "an impermissible collateral attack on the Commission's rules" for "advocat[ing] stricter requirements than those imposed by the regulations." None of the NRC's environmental regulations require the Applicant to provide the details of the lease by which it will obtain use of the land for the facility. See 10 C.F.R. § 51.45. 10 C.F.R. § 51.45 requires the Applicant to include the economic costs of the proposed facility in its environmental analysis. 10 C.F.R. § 51.45(c). The Environmental Report has done this. 10 C.F.R. § 51.45 does not, however, require the Applicant to describe one component of these economic costs, the details of its lease arrangement with the Goshutes. Id. Therefore, because this subcontention advocates stricter requirements than those imposed by the regulations, it must be dismissed.

Since Castle Rock does not even allege that the cost estimate is inaccurate, let alone that any environmental impact would result from its inaccuracy (Castle Rock Petition at 53), the alleged injury falls outside the zone of interest of NEPA, and thus this subcontention must be dismissed.

d) Intent to Offer Evidence on True Costs

Castle Rock states that it "intend[s] to offer evidence with respect to the true costs of the proposed facility." Castle Rock Petition at 53.

This subcontention must be dismissed because it is directly contrary to the 1989 amendments to the Commission's Rules of Practice. When filing a contention, a petitioner must "show that a genuine dispute exists between the petitioner and the applicant on a material issue of law or fact." 54 Fed. Reg. 33,168, 33,170. (1989) "[T]his will preclude a contention from being admitted where an intervenor has no facts to support its position and where the intervenor contemplates using discovery or cross-examination as a fishing expedition which might produce relevant facts." Id. at 33,171. Thus, a petitioner cannot merely wait until the hearing to present the facts that ostensibly support its contention. It must come forward with them at the filing of its contention, or the contention will not be admitted. Castle Rock has not come forward here; so its subcontention must be dismissed.

Extraneous matters such as the preservation of rights (e.g., "[p]etitioners intend to offer evidence," Castle Rock Petition at 53) will be disregarded as contrary to the Rules of Practice. Commonwealth Edison Company (Byron Nuclear Power Station, Units 1 and 2), LBP-80-30, 12 NRC 683, 689-90 (1980). Therefore, this subcontention must be dismissed.

This subcontention must also be dismissed for containing neither a specific statement of the issue of law or fact to be raised nor references to the specific portions of the application that the petitioner disputes. 10 C.F.R. §§ 2.714(b)(2), (b)(2)(iii). In this

subcontention, Castle Rock does not specify any cost that the Applicant has wrongly omitted. See Castle Rock Petition at 53. Thus, the subcontention is nonspecific and must be dismissed.

P. Castle Rock Contention 16: Impacts on Flora, Fauna and Existing Land Uses

1. The Contention

Castle Rock alleges in Contention 16 that:

> The Application violates NRC regulations and NEPA because the ER does not adequately address the impact of the proposed PFSF upon the agriculture, recreation, wildlife, and endangered or threatened species, and land quality of the area. See 10 C.F.R. § 72.100(b).

Castle Rock Petition at 54. The asserted bases for the contention are set forth in two pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its bases:

> The Application violates NRC regulations and NEPA because the ER does not adequately address the impact of the proposed PFSF upon the agriculture, recreation, wildlife, and endangered or threatened species, and land quality of the area, see 10 C.F.R. § 72.100(b), in that
>
> a) The required regional impact should include all of Northwestern Utah.
>
> b) The ER fails to provide sufficient facts to understand true impacts.
>
> c) PFS has not conducted surveys to ascertain the presence and, if present, the exact location of rare species.

d) The ER impact evaluation is legally insufficient until such time as PFS identifies final location of transportation corridor.

2. Applicant's Response to the Contention

Castle Rock raises a number of issues under Contention 16, which we address in turn below.

a) Size of the Region Analyzed

Castle Rock claims that the Applicant's environmental impact analysis must be expanded to include all of northwestern Utah. Castle Rock Petition at 54, citing 10 C.F.R § 72.100(b) which requires an evaluation of "regional and site characteristics." According to Castle Rock, "[T]he word 'regional' [in § 72.100(b)] should be interpreted to refer to at least to all of northwestern Utah." Castle Rock Petition at 54.

Castle Rock provides no facts, expert opinion, or documents to support its assertion that the word "regional" must be defined to include all northwestern Utah. See Castle Rock Petition at 54. At the very least, Castle Rock would need to show that the facility would have impacts throughout "all of northwestern Utah." It has not done so. Absent such impacts, there would be no point in evaluating that geographic area. See 10 C.F.R. § 51.45(b)(1) ("Impacts shall be discussed in proportion to their significance"). Castle Rock provides no basis (nor does it even allege) that Applicant's facility will have any impacts on "all of northwestern Utah." See Castle Rock Petition at 54. An unsupported conclusory allegation of dispute is not sufficient to admit a contention. Here, Castle Rock has provided nothing more than that; so the subcontention must be dismissed.

This subcontention must also be dismissed because it does not include "sufficient information . . . to show that a genuine dispute exists with the applicant on a material issue of law or fact." 10 C.F.R. § 2.714(b)(2)(iii). It does not provide the supporting reasons for the petitioner's belief that the application is inadequate. Castle Rock never says why the word "regional" must be defined to include all of northwestern Utah. Castle Rock Petition at 54. Indeed, Castle Rock does not even define what is meant by "all of northwestern Utah." Thus, this subcontention must be dismissed.

b) Sufficiency of Facts and Information

Castle Rock claims that the Environmental Report is inadequate "because it fails to provide sufficient facts and information to enable one to understand what the true impacts of the PFSF project will be on the regional environment." Castle Rock Petition at 54.

This subcontention must be dismissed for lacking specificity. Castle Rock does not specify which facts or what information Applicant has allegedly not provided or which environmental impacts it is allegedly unable to understand because of the absence of such facts or information. See Castle Rock Petition at 54. Castle Rock makes no more than a broad, general allegation. Id. Thus, the subcontention is nonspecific and must be dismissed. The Applicant treats Castle Rock's other, more specific, points below.

Moreover, this subcontention must be dismissed because it does not include sufficient information to show that a genuine dispute exists with the Applicant on a material issue of law or fact. 10 C.F.R. § 2.714(b)(2)(iii). It does not provide the

supporting reasons for Castle Rock's belief that Environmental Report lacks information or does not enable one to understand its environmental impacts. In this subcontention, Castle Rock does not say which facts Applicant must provide or how the facts allegedly omitted would enable one to understand the impact of the ISFSI on the environment. Castle Rock Petition at 54. This subcontention must be dismissed.

c) Survey of the Site for Plants and Animals

Castle Rock asserts that the Environmental Report is inadequate because it does not contain sufficient facts concerning endangered, threatened, or sensitive species that "have been identified by State and Federal officials as being potentially impacted in an adverse way by the PFSF project . . . to determine the extent or significance" of the impacts upon them. Castle Rock Petition at 54. Castle Rock claims that the Applicant's reliance on "previously written" documentary evidence of the presence or absence of species in the vicinity of the ISFSI is "inadequate." Id. Castle Rock claims that the Applicant must "conduct a survey" to determine whether the species in question occur in the area. Id. Furthermore, Castle Rock claims that Applicant must state the "exact location" of the species in relation to the ISFSI site and transportation corridor. Id. at 55.

This subcontention must be dismissed because it does not include sufficient information to show that a genuine dispute exists with the Applicant on a material issue of law or fact. See Section II.C.2. supra. It provides no supporting reasons for Castle Rock's belief that Environmental Report's characterization of the location of animal and plant species around the ISFSI site is "inadequate." Castle Rock Petition at 54. Castle

Rock does not say why the Applicant must conduct a survey of the site or why the Applicant cannot rely on documentary sources regarding the occurrence of species in the area. See Id. at 54-55. Castle Rock does not say why the Applicant must indicate the "exact location" of the species within the area. See id. at 55. Castle Rock has not stated how the Application is inadequate. Therefore, this subcontention must be dismissed.

Additionally, this subcontention must be dismissed as "an impermissible collateral attack on the Commission's rules" for "advocat[ing] stricter requirements than those imposed by the regulations." Seabrook, LBP-82-106, 16 NRC at 1656. Nothing in the NRC's environmental regulations requires the Applicant to conduct its own survey of the site area for plant and animal species. See 10 C.F.R. §§ 51.45, 72.100(b). In fact, applicants, when preparing Environmental Reports, and the NRC Staff, when preparing Environmental Impact Statements, have frequently relied on data on area plant and animal species previously collected by other entities. See e.g., Duke Power Company (Perkins Nuclear Station, Units 1, 2, and 3), LBP-80-9, 11 NRC 310, 325 (1980) (environmental impact statements ("EIS") for projects in the same or similar locations, government reports, other reports); Tennessee Valley Authority (Hartsville Nuclear Plants, Units 1A, 2A, 1B, and 2B), ALAB-467, 7 NRC 459, 462-63 (1978) (Army Corps of Engineers map); All Chemical Isotope Enrichment, Inc. (AlChemIE Facility-1 CPDF; Facility-2, Oliver Springs), LBP-89-5, 29 NRC 99, 116 (1989) ("numerous studies and assessments"). Courts have rejected the proposition that Federal agencies must perform all their own surveys. Inland Empire Pub. Lands Council v. United States Forest Serv., 88 F.3d 754, 762 (9th Cir. 1996) ("an analysis that uses all the scientific data currently

available is a sound one"). Furthermore, in the place of direct observation, Federal agencies may use reasonable assumptions in characterizing species and their habitats in environmental analyses. See id. at 761 (citing Sierra Club v. Marita, 845 F. Supp. 1317, 1331 (E.D. Wis. 1994), aff'd, 46 F.3d 606 (7th Cir. 1995); Greenpeace Action v. Franklin, 14 F.3d 1324, 1335-36 (9th Cir. 1992)). Therefore, Castle Rock's contention, that Applicant cannot rely on documentary evidence of the location of plant and animal species near the ISFSI site and must perform its own survey, is clearly wrong and requires more than NRC regulations require. Accordingly, this subcontention must be dismissed.

Castle Rock also attacks the Commission's regulations in that it asserts that Applicant must determine the "exact location" of all relevant plant and animal species in the vicinity of the ISFSI site. Castle Rock Petition at 55. The NRC's environmental regulations require that Applicant analyze the "impacts" and "effects" of the proposed facility on the surrounding region. 10 C.F.R. §§ 51.45, 72.98, 72.100. The Applicant needs to determine the location of plant and animal species within the region only to the extent necessary to analyze the effects of the proposed ISFSI upon them; nothing requires the location to be exact. See e.g., AlChemIE Facility-1, LBP-89-5, 29 NRC at 116 (threatened plant within 3 km of facility, endangered mussel in neighboring river); Perkins, LBP-80-9, 11 NRC at 324, 326 (alternative sites characterized by number of endangered species in vicinity); Inland Empire, 88 F.3d at 761-62. Therefore, Castle Rock's assertion that Applicant must determine the exact location of the plant and animal species within the region around the proposed ISFSI is a collateral attack on the NRC's

regulations as it advocates stricter requirements than the regulations impose. Therefore, this subcontention must be dismissed.

d) Identification of the Final Location of the Transportation Corridor

Castle Rock states that the Applicant's environmental impact evaluation will continue to be inadequate and any attempt at NEPA compliance will be "fatally flawed" until the Applicant "identifies the final location of the transportation corridor to haul the spent fuel from I-80 south to the Goshute Reservation." Castle Rock Petition at 55. "Accordingly, Petitioners reserve the right to amend their Contentions . . . ." Id.

This subcontention must be dismissed because it does not include sufficient information to show that a genuine dispute exists with the Applicant on a material issue of law or fact. The Applicant has identified and analyzed for environmental impact two transportation corridor alternatives, one road and one rail. See ER §§ 4.3, 4.4. Castle Rock does not say why the Applicant must definitively choose one alternative over another at this stage of the process before its environmental impact evaluation will satisfy the NRC's requirements. See Castle Rock Petition at 55. Castle Rock should state how the application is inadequate to demonstrate a litigable contention. Shoreham, LBP-82-75, 16 NRC at 993. It must present a reasoned statement, supported by facts, expert opinion, or documents, of why the application is unacceptable. Castle Rock has not done so here; so this subcontention must be dismissed.

Castle Rock's preservation of rights should be disregarded as contrary to the Rules of Practice. Should there be additional subsequent information, NRC regulations

expressly provide a mechanism for raising late-filed contentions. 10 C.F.R. § 2.714(b)(2)(iii). No reservation of rights is necessary.

Q. Castle Rock Contention 17: Inadequate Consideration of Land Impacts

1. The Contention

Castle Rock alleges in Contention 17 that:

> The Application violates NRC regulations and NEPA because the ER does not adequately consider the impact of the facility upon such critical matters as future economic and residential development in the vicinity, potential differing land uses, property values, the tax base, and the loss of revenues and opportunity for agriculture, recreation, beef and dairy production, residential and commercial development, and investment opportunities, all of which have constituted the economic base and future use of Skull Valley and the economic interests of Petitioners, or how such impacts can and must be mitigated.

Castle Rock Petition at 56. The asserted bases for the contention are set forth in three pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its bases:

> The Application violates NRC regulations and NEPA because the ER does not adequately consider the impact of the facility upon such critical matters as future economic and residential development in the vicinity, potential differing land uses, property values, the tax base, and the loss of revenues and opportunity for agriculture, recreation, beef and dairy production, residential and commercial development, and investment opportunities, all of which have constituted the economic base and future use of Skull Valley and the economic interests of Petitioners, or how such impacts can and must be mitigated, in that:

a) The ER fails to recognize the potential of the area for and address the impact of the PFSF on future real estate and other development.

b) The ER fails to address the impact of the PFSF upon wilderness areas and nearby recreational land uses.

c) The ER is inadequate because it ignores anything outside a 50-mile radius from the PFSF.

d) The ER provides no information on the economic value of and inadequate information on the size of current agricultural/ranching operations in the area.

e) The ER fails to consider the diminution of property values and harm to investments and future economic benefits caused by the danger or perceived danger from the PFSF.

f) The ER fails to consider impact of placing PFSF next to dairy /beef operations.

2. Applicant's Response to the Contention

Castle Rock raises a number of issues under Contention 17, which we address in turn below.

a) Future Real Estate and Other Development

Castle Rock alleges that the ER does not adequately consider the impact of the proposed ISFSI on the future real estate and other development in the surrounding area. Castle Rock Petition at 56 (citing 10 C.F.R. § 72.98(c)(2)). According to Castle Rock, the land in the Skull Valley is attractive for potential development because of its proximity to Salt Lake City. Id. Castle Rock claims that the ISFSI would eliminate or sharply reduce the potential use of its lands and dangers and perceived dangers from the

ISFSI will drive away potential residential, commercial, and agricultural development. Id. at 56-57.

This subcontention must be dismissed because Castle Rock provides no facts, expert opinion, or documents to support its allegation that the area has significant development potential or that the Applicant's ISFSI will have any impact on future development in the area. See Castle Rock Petition at 56-57. Its allegation concerning prospective developers' fear of the ISFSI is wholly speculative. See id. at 57. Even where a petitioner postulates specific environmental effects of a proposed action (which Castle Rock has not done here), its contention will be deemed speculative and inadmissible without showing that such effects have ever occurred. Illinois Power Company (Clinton Power Station, Unit No. 1), LBP-82-103, 16 NRC 1603, 1613 (1982); Illinois Power Company (Clinton Power Station, Unit Nos. 1 and 2), ALAB-340, 4 NRC 27, 50-51 (1976). Because this subcontention contains no more than conclusory allegations, and does not show that the Applicant's ISFSI will have any impact on future development in the area, it must be dismissed.

Furthermore, this subcontention must be dismissed because it ignores relevant material submitted by the Applicant. The ER characterizes the ownership and current use of the land around the PFSF site. ER at 2.1-1 to 3, 2.2-2 to 4, Figure 2.2-1. Land uses within the Skull Valley Indian Reservation consist of residential uses (approximately 30 persons living on the Reservation) and the Tekoi Rocket Engine Test Facility. Id. at 2.1-3. The principal land use in the Skull Valley is rangeland for livestock grazing. Id. at 2.2-2. The land in the Skull Valley outside the Indian Reservation is regulated by Tooele

County Zoning and is currently zoned into Multiple Use Districts, consisting of open, undeveloped areas, with minimum lot sizes of 40 acres, and Agricultural Districts, consisting of areas used for farming, recreational, and residential purposes, with minimum lot sizes of 20 acres. Id. at 2.2-3 to 4. The ER also addresses projected population growth for the area around the site. Id. at 2.2-4 to 7. The ER also graphically projects population growth for the area within a 50-mile radius of the site between 1990 and 2020. Id. at Figures 2.2-2 and 3. The ER projects that the ISFSI will not preclude the future development of residential, commercial, or industrial facilities outside the Owner Controlled Area of the site. Id. at 4.1-2, 4.2-1. Because Castle Rock has ignored the Environmental Report's discussion of the issues which Castle Rock claims have not been addressed this subcontention must be dismissed.

b) Nearby Wilderness Areas and Recreational Land Uses

Castle Rock claims that the ER does not adequately consider the impact of the ISFSI on recreational land uses such as those in Deseret Peak National Wilderness Area. Castle Rock Petition at 56.

This subcontention must be dismissed because it fails to provide facts, expert opinion, or documents to support its allegation that the Applicant's ISFSI will have any impact on recreation at Deseret Peak or anywhere else. See Castle Rock Petition at 56-57. This is a bald and conclusory allegation of dispute in which Castle Rock does not even speculate as to the types of impacts that the that Applicant's ISFSI might have on local recreation; thus it must be dismissed.

Moreover, this subcontention must be dismissed because it ignores relevant material submitted by the Applicant. The ER addresses recreational activities around the area of the proposed ISFSI. See ER at 2.2-3. It recognizes off-highway vehicle use, dispersed camping, and hunting activities in the general area. Id. The EP recognizes Deseret Peak and the Deseret Peak Wilderness Area, which is located six miles east of the site, as regional scenic features. Id. at 2.9-4. It addresses the impact the ISFSI and construction traffic might have on views from the wilderness area across Skull Valley. Id. at 4.2-7. Because Castle Rock has ignored this material, the subcontention must be dismissed.

Finally, this subcontention must be dismissed because it does not include "sufficient information . . . to show that a genuine dispute exists with the applicant on a material issue of law or fact." 10 C.F.R. § 21.714(b)(2)(iii). It does not provide the "supporting reasons for the petitioner's belief" that the application is inadequate. Id. Although Castle Rock claims that the Environmental Report's consideration of impacts on recreation is inadequate, it never says why. Castle Rock Petition at 56. Thus, this subcontention must be dismissed.

c) 50-Mile Radius

Castle Rock alleges that the ER "understates the size of the potentially impacted population" by limiting its consideration of impacts to those within a 50-mile radius of the proposed ISFSI. Castle Rock Petition at 57. Such limitation includes only part of the population of the Salt Lake Valley. Id.

This subcontention too must be dismissed because Castle Rock provides no facts, expert opinion, or documents whatsoever to support its implied claim that the Applicant's ISFSI will have any environmental impacts on populations more than 50 miles from the site. See Castle Rock Petition at 56-57. This is another unsupported allegation of dispute in which Castle Rock does not even speculate as to the types of impacts that the that Applicant's ISFSI might have; thus it must be dismissed.

Moreover, this subcontention must be dismissed as "an impermissible collateral attack on the Commission's rules" for "advocat[ing] stricter requirements than those imposed by the regulations." Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), LBP-82-106, 16 NRC 1649, 1656 (1982). 10 C.F.R. § 51.61 requires an ISFSI license applicant to file an ER that includes the information required by 10 C.F.R. § 51.45 and addresses the siting factors contained in Part 72, Subpart E. 10 C.F.R. § 72.61. 10 C.F.R. § 51.45 requires that the ER contain "a description of the environment affected" and "the impact of the proposed action on the environment." 10 C.F.R. § 51.45 (emphasis added). The siting factors in Part 72, Subpart E require the ER to address "the potential regional impact due to the construction, operation, or decommissioning of the ISFSI . . . on the basis of potential measurable effects on the population or the environment from ISFSI . . . activities." 10 C.F.R. § 72.98(b) (emphasis added). Thus, there is no requirement to perform an assessment for the ER regarding populations that cannot be measurably affected by operations at the ISFSI. Castle Rock alleges that the ER should consider the "potentially impacted population" outside of a 50-mile radius from the site without providing any reason at all to believe

that that population would actually be affected by ISFSI operations. Castle Rock Petition at 57. Therefore, Castle Rock seeks to impose stricter requirements on the Applicant than the NRC's regulations do, and this subcontention must be dismissed.

Finally, to the extent that the transportation of spent fuel is a secondary effect of the ISFSI, the Applicant has addressed the environmental impacts of transportation throughout the region. See Applicant's Response to Castle Rock Contention 14. Hence, this subcontention must be dismissed because it ignores relevant material submitted by the Applicant. See e.g., Vogtle, LBP-91-21, 33 NRC at 424; Rancho Seco, LBP-93-23, 38 NRC at 247-48.

d) Size and Economic Value of Current Agricultural/Ranching Operations

Castle Rock asserts that the ER is inadequate because it provides no information on the economic value of the current agricultural/ranching operations in the area and provides only the most general information on the relative size of the operations. Castle Rock Petition at 57-58.

This subcontention must be dismissed for advocating stricter requirements than those imposed by NRC regulations. Seabrook, LBP-82-106, 16 NRC at 1656. The regulations require that the ER assess "the impact of the proposed action on the environment" (10 C.F.R. § 51.45), and address the potential regional impact from the ISFSI on the basis of potential measurable effects on the environment (10 C.F.R. § 72.98(b)). Within the region potentially affected, the ER must consider present and

future projected uses of land. 10 C.F.R. § 72.98(c)(2). Nothing requires that the Applicant determine the economic value of agricultural or ranching operations in the area.

Moreover, this subcontention must be dismissed because it does not include "sufficient information . . . to show that a genuine dispute exists with the applicant on a material issue of law or fact." 10 C.F.R. § 2.714(b)(2)(iii). Castle Rock alleges that the ER should provide data on the economic value of local agricultural operations without providing any reason at all to believe that the operations would actually be affected by the ISFSI. Castle Rock Petition at 57. It alleges, without any basis whatsoever, that the impact of the ISFSI would be "devastating." Id. at 58. Furthermore, it provides no reason to believe that the economic value of the agricultural or ranching operations are relevant at all to any environmental analysis. Id. at 57-58; see Texas Utilities Generating Company (Comanche Peak Steam Electric Station, Units 1 and 2), ALAB-260, 1 NRC 51, 54 (1975) (depth of analysis required by NEPA "rule of reason" depends on total land productivity affected; construction of nuclear power plant taking land of marginal utility completely out of service required little consideration); Clinton, ALAB-340, 4 NRC at 43 (rejecting use of monetary value of production as measure of impact of taking land out of service). Castle Rock provides no reason to believe that the operations in question would be affected by the ISFSI, which is not surprising given the proximity of agricultural operations to virtually all licensed nuclear facilities in the United States. See, e.g., Carolina Power & Light Company (Shearon Harris Nuclear Plant), LBP-86-11, 23 NRC 299, 393 (1986) (agricultural and recreational activities take place within reactor emergency planning zone. Therefore, this subcontention must be dismissed.

Finally, regarding the size of local agricultural and ranching operations, this subcontention must be dismissed because it ignores relevant material submitted by the Applicant. See e.g., Vogtle, LBP-91-21, 33 NRC at 424; Rancho Seco, LBP-93-23, 38 NRC at 247-48. The Environmental Report discusses ranching and grazing operations in the vicinity of the Skull Valley Indian Reservation. ER at 2.2-2 to 4. It describes the number of cattle and sheep that are permitted to graze on BLM land in the area. Id. at 2.2-2. It describes the grazing cycles for cattle and sheep. Id. And, it describes the locations of the grazing pastures in relation to the ISFSI site. Id. Furthermore, it describes the pattern of zoning in Tooele County by which land is allocated to agricultural purpose. Id. at 2.2-3 to 4. Therefore, because Castle Rock overlooks relevant material submitted by the Applicant, its subcontention must be dismissed.

e) Diminution of Property Value and Harm to Investments and Future Economic Benefit

Castle Rock claims that the ER fails to consider the impact of the ISFSI on property values, investments and future economic benefits to be obtained from land use. Castle Rock Petition at 57. Castle Rock alleges that property values and investments will be harmed because of fears stemming from the danger and perceived danger from the ISFSI. Id. (citing City of Santa Fe v. Komis, 845 P.2d 753, 756 (N.M. 1992)). According to Castle Rock, businesses and developers will not want to locate in the vicinity of the site. Id. "Moreover, [Castle Rock] cannot fully assess such aspects because PFS has not given data on safety, transportation, environment, etc." Id.

First, this subcontention must be dismissed because Castle Rock has provided no facts or expert opinion, together with references to specific sources and documents to establish such facts or expert opinion, to support its contention. 10 C.F.R § 2.714(b)(2)(ii). Castle Rock provides no facts, expert opinion, or documents whatsoever to support its claim that the Applicant's ISFSI will harm property values, investments, or future economic benefits in the area. See Castle Rock Petition at 56-57. It states without support or citation that "[p]etitioners believe that the proposed PFSF would eliminate or sharply reduce their investment value and potential use of their lands." Id. at 57 (emphasis added). They provide no facts to warrant such a belief besides unsupported allegations that food production businesses will terminate negotiations with local land owners and that residential and commercial development adjacent to the PFSF "would no longer be desirable." Id. These are bald and conclusory allegations of dispute and thus this subcontention must be dismissed. Comanche Peak, LBP-92-37, 36 NRC at, 376; see Clinton, LBP-82-103, 16 NRC at 1613.

To the extent that one might infer factual support for Castle Rock's allegations from its citation of City of Santa Fe v. Komis, 845 P.2d 753, 756 (N.M. 1992), this subcontention should nonetheless be dismissed because Castle Rock provides nothing to support its analogy between this case and the facts of that case.[85] Castle Rock Petition at 57. If a petitioner contends that a license application is inadequate on the basis of an

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[85] City of Santa Fe v. Komis, 845 P.2d 753 (N.M. 1992), cited by Castle Rock to support its position, is inapposite to this hearing. That case involved a government taking of property and the issue of the amount to be paid to the landowners for their loss. Id. at 755. The court decided that public fear of the use to which the condemned land would be put and its impact on the value of the owners' remaining land was cognizable under New Mexico law. Id. at 755 & n.1 (interpreting NMSA 1978, Section 42-2-15(A)).

analogy between the Applicant's facility and a proposed benchmark, the petitioner must establish that the benchmark is valid to show that the analogy raises a disputed material issue of fact with the Applicant. Yankee Atomic Electric Company (Yankee Nuclear Power Station), LBP-96-15, 44 NRC 8, 32 (1996); Yankee Atomic Electric Company (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 267 (1996) (petitioner must show "logical relationship" with alleged analogy); see also Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 305 (1995) ("the Board may not make factual inferences on [a] petitioner's behalf"). Castle Rock does not even discuss the facts of City of Santa Fe; so, this subcontention must be dismissed.

Finally, this subcontention must be dismissed because psychological effects are outside the zone of interest protected by the Atomic Energy Act ("AEA") and NEPA, the statutes under which the NRC holds licensing hearings. Metropolitan Edison Company (Three Mile Island Nuclear Station, Unit No. 1), CLI-82-6, 15 NRC 407, 408 (1982) (AEA); Metropolitan Edison Co. v. People Against Nuclear Energy, 460 U.S. 766, 772 (1983) (NEPA). Purely economic effects are also outside the zones of interest of the AEA and NEPA and may not give rise to admissible contentions. See e.g., Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), CLI-92-2, 35 NRC 47, 56 (1992). NEPA does not encompass adverse health effects resulting from the fear of the risk of an accident at a nuclear power plant. Metropolitan Edison, 460 U.S. at 775. And it does not encompass effects on property values arising solely out of the fear of the presence of a nuclear power plant, Houston Lighting and Power Company (Allens Creek

Nuclear Generating Station, Unit 1), ALAB-582, 11 NRC 239, 242 (1980), or the fear of radiological contamination potentially caused by a nuclear power plant, Philadelphia Electric Company (Limerick Generating Station, Units 1 and 2), LBP-82-43A, 15 NRC 1423, 1448-49 (1982). To be cognizable under NEPA, there must be "a reasonably close causal relationship between a change in the physical environment and the effect at issue." Metropolitan Edison, 460 U.S. at 774 (emphasis added). Whether the fear is unreasonable or reasonable, see Castle Rock Petition at 57, is irrelevant; fear and its effects on property values, investments, or business opportunities do not give rise to litigable contentions and thus this subcontention must be dismissed.

f) Impact on Dairy/Beef Operations

Castle Rock asserts that the ER fails to consider the "devastating impact" of placing the ISFSI next to a dairy/beef operation. Castle Rock Petition at 58.

The Applicant addresses this issue in its response to Castle Rock Contention 18.

R. Castle Rock Contention 18: Impacts on Public Health

1. The Contention

Castle Rock alleges in Contention 18 that:

> The Application violates NRC regulations and NEPA because the ER does not adequately consider the impact of the proposed PFSF upon the production of the agricultural products for human consumption by Petitioners, their tenants and others in the area. See 10 C.F.R. § 72.98(b).

See Castle Rock Petition at 58. The bases for the contention is set forth on the same page of the petition. In order to focus the analysis on whether the contention should be

admitted, the Applicant proposes that the contention be restated incorporating as follows the specific allegations raised in its bases:

> The Application violates NRC regulations and NEPA because the Environmental Report (ER) does not adequately consider the impact of the proposed PFSF upon the production of the agricultural products for human consumption by Petitioners, their tenants and others in the area (see 10 C.F.R. 72.98(b)) in that:
>
> a) The ER fails to analyze, evaluate, or consider the potential impacts on the regional population associated with potential contamination of plants or animals destined for human consumption.
>
> b) The ER provides no detailed description at all of the coordinated ranching, farming, and livestock production activities currently carried on by Petitioners.

2. Applicant's Response to the Contention

Castle Rock raises two issues under its Contention 18, each of which we address in turn below.

a) Failure to Analyze Impacts on Regional Population from Potential Contamination of Plants and Animals

As set forth above, Castle Rock alleges that the Environmental Report fails to "analyze, evaluate, or consider the potential impacts on the regional population associated with potential contamination of plants and animals destined for human consumption." Castle Rock Supp. Petition at 58. Castle Rock's contention asserts that "NEPA requires this specific evaluation to be included in the ER and forthcoming EIS." Id.

The only basis cited by Castle Rock for this contention is 10 C.F.R. § 72.98(b), which states:

> The potential regional impact due to the construction, operation or decommissioning of the ISFSI or MRS must be identified. The extent of regional impacts must be determined on the basis of potential measurable effects on the population or the environment from ISFSI or MRS operations.

(emphasis added). Castle Rock's contention fails to identify any basis in the License Application, or any other basis of any kind to support its assertion that the proposed facility will have any "measurable effect[]" whatsoever "upon the production of the agricultural products for human consumption." See generally, Castle Rock Supp. Petition at 58. Castle Rock's contention does not identify any mechanism, or provide any facts, references, or any other information to support its assertion. Castle Rock's contention must be rejected for failing to establish a basis for an admissible contention. See Section II.C., supra.

Moreover, Castle Rock has ignored relevant information in the License Application. PFS has performed a bounding calculation of offsite dose consequences in the License Application using the worst case assumptions for offsite dose, as recommended by the NRC. This worst-case offsite dose calculation envelopes any possible dose consequences from the "potential contamination of plants or animals destined for human consumption." The offsite dose calculations in the Applicant's License Application assumes a worst-case instantaneous release from both the off-normal contamination release and the hypothetical breach of a storage canister and evaluates the dose to a maximally exposed individual located at the nearest point on the site boundary who is assumed to be there for the duration of the release. See SAR § 8.2.7. This

analysis assumes a worst case instantaneous release (and instantaneous exposure),[86] as recommended by the NRC for a bounding offsite dose calculation.

This NRC-recommended worst-case bounding dose analysis assumes an instantaneous release (and instantaneous exposure), and does not include an analysis of dose from "potential contamination of plants or animals destined for human consumption." See NUREG-1536 at 7-5 to 7-7. Doses from the ingestion of contaminated plants and animals are enveloped by the worst case assumptions of "instantaneous release (and instantaneous exposure)" that are recommended by the NRC, even though they are not included in the analysis. They are not included because the exposure pathway of "potential contamination of plants or animals destined for human consumption" does not occur instantaneously, but takes days or weeks to develop and therefore their inclusion would result in exposures less than worst-case postulated design basis event, as defined by the NRC in NUREG-1536.[87]

The Applicant did a worst case analysis both off normal and postulated accident conditions. The off-normal contamination release analysis concludes that the effect on populations in the region from a "postulated release of surface contamination from the canister exterior" would be a maximum of 4.4×10^{-3} mrem committed effective dose

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[86] See Calculation Package Vol. II, Tab 17, "Accident λ/Qs for the Private Fuel Storage Facility ("PFSF")," SWEC calc. No. 05996.01-UR-1 at 8; Calculation Package Vol. II, Tab 18, "Doses From Hypothetical Loss of Canister Confinement Accident," SWEC Calculation No. 05996.01-UR-2 at 7.

[87] The NRC Staff guidance in NUREG-1536 notes that for this dose analysis "the leak is assumed to be instantaneous" and then clearly states:

> Note that for an instantaneous release (and instantaneous exposure), the time that an individual remains at the controlled area boundary is not a factor in the dose calculation.

equivalent ("CEDE"), and 2.6 x 10^{-2} mrem committed dose equivalent ("CDE"), to the lungs, the maximally exposed organ, to an individual assumed to be standing at the site boundary.[88] See ER at 5.1-1 to 6. The hypothetical loss of confinement barrier accident concluded that the effect on populations in the region from a "non-mechanistic breach of the canister confinement, hypothesized for purposes of assessing bounding doses at the site boundary" would be a maximum of 0.752 rem CEDE, and 3.48 rem CDE, to an individual assumed to be standing at the nearest point of the site boundary for the entire duration of the release. ER at 5.1-4.[89]

Both these worst case analyses bound the dose any real person could receive from such events and envelopes any dose a real person could receive from indirect secondary dose sources such as plant and animal consumption. Thus, this analysis does what Castle Rock claims the Applicant should do: It assesses and bounds the potential impacts on the regional population from releases of radioactive material, including that received from indirect secondary sources. Castle Rock's contention neither addresses nor challenges the validity of this conclusion. It neither identifies any alleged flaw in this computation, as required by 10 C.F.R. § 2.714(2)(b)(iii), or provides facts or expert opinion to contest the analyses or its results, as required by 10 C.F.R. § 2.714(b)(2)(ii). Accordingly, this contention must be rejected.

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[88] This is far less (less than 0.02 percent) than the 25 mrem whole body CEDE annual dose limit set by the Commission for normal and anticipated occurrences. See 10 C.F.R. § 72.104(a).

[89] This is far less than the 5 rem whole body CEDE dose limit set by the Commission for design basis accidents. See 10 C.F.R. § 72.106(b).

Further, the Commission's regulations do not require the License Application to evaluate an exposure pathway (e.g., contamination of plants or animals destined for human consumption) that does not occur as a result of the postulated design basis event that the Applicant is evaluating. See 10 C.F.R. § 72.24(m). The NRC Staff guidance for bounding offsite dose calculations supports this position. See NUREG-1536 at 7-7 ("time . . . is not a factor in the dose calculation . . . for an instantaneous release (and instantaneous exposure)"). The State's contention would require more. A contention which "advocate[s] stricter requirements than those imposed by the regulations" is "an impermissible collateral attack on the Commission's rules" and must be rejected. See Section II.B. supra.

b) No Detailed Description at All of The Petitioner's Ranching, Farming, and Livestock Production Activities

As set forth above, Castle Rock contends that the Environmental Report provides no detailed description at all of the coordinated ranching, farming, and livestock production activities currently carried on by the Petitioners. A contention that mistakenly claims that the Applicant did not address a relevant issue in the license application must be dismissed. In setting forth a contention pursuant to 10 C.F.R. § 2.714(b), a petitioner is required to "read the pertinent portions of the license application, including the Safety Analysis Report and the Environmental Report, state the applicant's position and the petitioner's opposing view." See 54 Fed. Reg. at 33,170.

Contrary to Castle Rock's assertion, the Applicant's Environmental Report does address the use of the region around the PFSF as rangeland for livestock grazing. See ER

at 2.2-2. The analysis in the Environmental Report addresses the agricultural activities of all entities operating in the region of the PFSF, as the regulations require. See 10 C.F.R. § 72.98 ("the potential regional impact") (emphasis added). The Environmental Report explicitly recognizes the number, type, and timetables of livestock grazed in the region of the PFSF by regional sheep and cattle ranchers. ER at 2.2-2. The Environmental Report describes in some detail the specific type of vegetation in the region of the PFSF that is used for grazing by ranchers, and the range forage condition of land around the PFSF. See id. at 2.3-2 to 4. The Environmental Report evaluates the effect of the PFSF on the use of livestock grazing lands in the region around the PFSF. The Environmental Report concludes that the PFSF

> will remove 820 acres from potential use as livestock grazing lands. This reduction in area will not result in a significant loss of valuable grazing land. It represents less than 0.5 percent of the 271,000 acres of rangeland in Skull Valley, the majority of which is characterized as of fair to poor quality.

Id. at 4.2-1. Castle Rock's contention neither addresses nor challenges the validity of these findings and conclusions in the Applicant's Environmental Report.

To the extent that Castle Rock's contention alleges that the Environmental Report "fails to contain information on a relevant matter as required by law," Castle Rock must "explain why the application is deficient." Id.; see 10 C.F.R. § 2.714(b)(2)(iii). A petitioner alleging that part of an application is "inadequate" has the obligation to specify how the application is inadequate in order to demonstrate a litigable contention. Long Island Lighting Company (Shoreham Nuclear Power Station, Unit 1), LBP-82-75, 16

NRC 986, 993 (1982). Castle Rock's contention does not "explain why the application is deficient" or "inadequate" in analyzing the impact of the PFSF on regional agricultural operations. Castle Rock's contention does not address or challenge the findings of this analysis in the Environmental Report. To the extent Castle Rock's contention alleges the Environmental Report is "deficient" or "inadequate," it must be rejected for failing to provide the specificity and basis required by the Commission's regulations for contentions.

S. Castle Rock Contention 19: Septic Tank.

1. The Contention

Castle Rock alleges in Contention 19 that:

> The Application violates NRC regulations and NEPA because the ER does not adequately consider the impact of a septic tank system on the ground water and ecology of the area and the related potential of this system to injure Petitioners. See 10 C.F.R. §§ 72.98(b) and 72.100(b).

Castle Rock Petition at 58. The asserted bases for the contention are set forth in less than one page of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its bases:

> The Application violates NRC regulations and NEPA because the ER does not adequately consider the impact of a septic tank system on the ground water and ecology of the area and the related potential of this system to injure Petitioners (See 10 C.F.R. §§ 72.98(b) and 72.100(b)), in that

a) The ER contains very little information on how sewage wastes will be managed at the proposed facility during both the construction and operation facilities.

b) The ER fails to discuss in detail how the septic system will be designed so as to eliminate the risk of contamination to groundwater and petitioner's property.

2. Applicant's Response to the Contention

As discussed below, Castle Rock's Contention 19 is totally flawed under the amended Rules of Practice and must be rejected.

a) Management of Sewage Wastes

Castle Rock does not provide any support to explain why additional information on how sewage wastes will be managed at the proposed facility is necessary at this stage. An underground septic system with two leach fields, designed to meet State requirements, will be used for normal facility services. ER, §§ 2.5.4, 3.3, 4.2.2. Castle Rock does not explain why additional information is needed or what that information might be.

b) Design of the Septic System

Castle Rock's contention that the Application and Environmental Report do not address in detail how the septic system will be designed so as to eliminate the risk of contamination to groundwater and Castle Rock's property is inaccurate. Specifically, the Application establishes that the design of the septic system is based on normal sanitary wastes for PFSF personnel. SAR Section 4.3.6. Also, the PFSF is designed to preclude radioactive material from entering the system, i.e., no floor drains are located in the Canister Transfer Building which precludes the possibility of contamination entering the

septic system. SAR Section 4.7.1. The environmental impacts of system effluents, facility operation, and effects on ecological resources are also specifically addressed in SER sections 2.5.4, 3.3, and 4.2.2. The PFSF septic system will be designed to meet state requirements. As stated in the Environmental Report (Section 3.3), the site soils appear to be suitable for septic tank and leach field development. Hence, no impact to local resources will result from the effluents. Castle Rock provides no grounds for questioning the information presented.

T. Castle Rock Contention 20: Selection of Road or Rail Access to PSFS Site

1. The Contention

Castle Rock alleges in Contention 20 that:

> The Application violates NRC regulations and NEPA because it fails to describe the considerations governing selection of either the Skull Valley [R]oad or the rail spur access alternative over the other and the implications of such selection in light of such considerations. See 10 C.F.R. §§ 51.45(c) and 72.100(b).

Castle Rock Petition at 59. The asserted bases for the contention are set forth in two pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its bases:

> The Application violates NRC regulations and NEPA because it fails to describe the considerations governing selection of either the Skull Valley Road or the rail spur access alternative over the other and the implications of such selection in light of such considerations. See 10 C.F.R. §§ 51.45(c) and 72.100(b), in that

a) The ER is deficient because it fails to properly analyze the transportation alternatives.

b) The ER is incomplete because investigations and studies have not been performed which will have a direct bearing on the environmental effects of the alternative selected.

c) The ER is defective because PFS is considering a third option not discussed in the ER.

d) The ER fails to mention some significant environmental effects of the transportation alternatives such as increased traffic and noise.

2. Applicant's Response to the Contention

The Petitioner raises a number of related issues under Contention 20, which we will address below.

a) Environmental Report Fails to Analyze Transportation Alternatives.

This subcontention must be dismissed because it ignores relevant material submitted by the Applicant. See, Section II.C.2 supra. The Environmental Report not only provides similar discussions of the environmental effects for the road (ER Section 4.3) and rail (ER Section 4.4) alternatives but sets forth comparisons between them, as appropriate. For instance, Applicant indicates that the rail alternative will (1) result in the permanent alteration of approximately 52.5 acres more than the road expansion (ER Section 4.4.1); (2) have similar construction and operation and impacts as those described for heavy haul transport (ER Section 4.4.3); and (3) require a slightly wider right of way than the heavy haul road so the locations of the springs will need to be evaluated (ER Section 4.4.4). Other than erroneously stating that in the ER "there is little, if any,

analysis that 'considers and balances' the advantages and disadvantages" of the road and rail alternatives (Castle Rock Petition at 59) the subcontention contains neither specificity nor basis. Therefore, because Castle Rock has ignored the Environmental Report and has provided no basis for its allegations, this subcontention must be rejected.

b) The Environmental Report Is Incomplete Because Investigations and Studies Have Not Been Performed.

This subcontention alleges that the Environmental Report violates NEPA and NRC regulations because a "Class III Cultural Resources Survey" and other consultations and studies have not yet been performed. Castle Rock Petition at 59. The subcontention must be dismissed for advocating stricter requirements than those composed by the regulations and for lacking a basis. The Environmental Report clearly states that these surveys and studies will be performed. See, e.g., ER at 4.3-2, 4.3-9, 4.4-2, 4.4-5, 9.2-1. Castle Rock does not claim that the surveys and studies that will be performed are inadequate. Furthermore, there is no requirement in NEPA or NRC regulations that these studies and consultations should have already been performed at this stage. If the studies, when they are performed, result in new information, Castle Rock may seek to submit new or amended contentions at that time. See, 10 C.F.R. § 2.714(a)(3). Hence, the petitioners contention should be rejected.

c) PFS Is Considering A Third Transportation Alternative Not Mentioned

Castle Rock argues that the Environmental Report is defective because it does not mention a transportation alternative that Castle Rock understands that Applicant is

considering. Castle Rock Petition at 60. As with any other new information that may arise during the course of the proceeding, Castle Rock is entitled to demonstrate good cause for submitting a late-filed contention based upon that new information. See 10 C.F.R. 2.714(a)(3). The possibility that new information might arise is not, however, the basis for a contention.

d) The Environmental Report Fails to Mention Some Significant Environmental Effects of the Transportation Alternatives Such as Increased Traffic and Noise

This contention claims that the Environmental Report fails to mention some significant environmental effects of the transportation alternatives such as increased traffic and noise. Castle Rock Petition at 60. In fact, the Environmental Report does consider these effects. See ER sections 4.3.7 and 4.4.7. Section 4.3.7 of the Environmental Report specifically deals with the effects of widening the road on traffic and noise (e.g., "widening Skull Valley Road will result in some temporary disruption of traffic . . .") and Section 4.4.7 addresses the effects of installing a new railroad spur (e.g., ". . . transport by rail could have adverse impacts on sensitive residential receptors. . ."). The contention must, therefore, be dismissed because it ignores relevant material submitted by Applicant.

U. Castle Rock Contention 21: Exact Location of Rail Spur

1. The Contention

Castle Rock alleges in Contention 21 that:

> The Application violates NRC regulations and NEPA because it fails to describe in detail the route of the potential rail spur, property ownership along the route, and

> property rights needed to construct and operate the rail spur. See 10 C.F.R. § 72.90(a).

Castle Rock Petition at 60. The asserted bases for the contention are set forth in less than one page of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its bases:

> The Application violates NRC regulations and NEPA because it fails to describe in detail the route of the potential rail spur, property ownership along the route, and property rights needed to construct and operate the rail spur (see 10 C.F.R. § 72.90(a)), in that
>
> a) The ER fails to provide any detail concerning location of the rail spur and impact on property rights along the route.
>
> b) Upon information and belief, ER is defective because PFS is considering two locations for the rail spur.

2. Applicant's Response to the Contention

The petitioner raises two issues under Contention 21.

a) Location of Rail Spur and Impact on Property Rights

This subcontention must be dismissed because it ignores relevant material submitted by the Applicant. Applicant specifically addresses the location and effects on property of a railroad spur alternative. In the railroad alternative discussion in the Environmental Report, the rail spur will be 24 miles long, beginning at the railroad mainline and continuing south to the PFSF site. ER Section 4.4. The railroad will consist of a single track installed parallel to the existing Skull Valley Road. Id.

Construction of the railroad will require the alteration of approximately 81.5 acres of land adjacent to the existing road. Id. at section 4.4.1. It is anticipated, however, that the railroad will require only minor realignment of range fencing, driveways and other roadside utilities that are all present with the road's existing right of way. Id. It is not expected to require relocation of any residential, commercial or industrial structures. Id. Also, the Applicant states that additional survey work will be done to ascertain the effect on two residences that will be closer to the rail spur than equipment under the road transportation alternative. Id. Castle Rock simply ignores this information, failing to point out why it may be in error. Since the Petitioner has ignored this relevant material, this subcontention must be rejected.

b) Two Possible Locations for Rail Spur

Castle Rock argues that the Environmental Report is defective because it does not discuss a transportation alternative that Castle Rock understands that the Applicant is considering. Castle Rock Petition at 61. As with any other new information that may arise during the course of the proceeding, Castle Rock is entitled to demonstrate good cause for submitting a late-filed contention based upon that new information. See, 10 C.F.R. § 2.714(a)(iii).

V. Castle Rock Contention 22: Road Expansion Authorizations.

1. The Contention

Castle Rock alleges in Contention 22 that:

> The Application violates NRC regulations and NEPA because it fails to describe adequately the nature and ownership of right-of-way that would permit PFS's

> contemplated improvements of the Skull Valley Road and what permits and approval from, or agreements with, the owner or owners thereof are needed for such improvements. See 10 C.F.R. § 72.90(a).

Castle Rock Petition at 61. The asserted bases for the contention are set forth in a page of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its bases:

> The Application violates NRC regulations and NEPA because it fails to describe adequately the nature and ownership of right-of-way that would permit PFS's contemplated improvements of the Skull Valley Road and what permits and approval from, or agreements with, the owner or owners thereof are needed for such improvements, see 10 C.F.R. § 72.90(a), in that the assertion in the ER that Skull Valley road expansion could occur within existing right-of-way and with no additional land acquisition is demonstrably incorrect.

2. Applicant's Response to the Contention

Castle Rock contends that the Environmental Report's statement (cited in the contention) that the Skull Valley road expansion could occur within the existing right-of-way and with no land acquisition from Castle Rock is "demonstrably incorrect." Castle Rock Petition at 62. Castle Rock, however, provides absolutely no factual basis, expert opinion or supporting documents to support its contention that the expansion could not occur with the existing right-of-way.

It requests instead to present evidence to this effect at the hearing. This is insufficient under the amended rules of practice. Castle Rock states that it "desires to

present evidence [in support of its contention] at a hearing." Castle Rock Petition at 62. This statement it is directly contrary to the intent of the 1989 amendments to the Commission's Rules of Practice. When filing a contention, a petitioner must "show that a genuine dispute exists between the petitioner and the applicant on a material issue of law or fact." 54 Fed. Reg. 33,168, 33,171 (1989) A proper request to intervene in a hearing "shall include a statement of the facts supporting each contention together with references to the sources and documents on which the intervenor relies to establish those facts." Id. "[T]his will preclude a contention from being admitted where an intervenor has no facts to support its position and where the intervenor contemplates using discovery or cross-examination as a fishing expedition which might produce relevant facts." Id.

Thus, a petitioner cannot merely wait until the hearing to present facts that ostensibly support its contention. It must come forward with facts at the filing of its contentions.

W. Castle Rock Contention 23: Existing Land Uses

1. The Contention

Castle Rock alleges in Contention 23 that:

> The Application violates NRC regulations and NEPA because it fails to describe with particularity, using appropriate maps, land use patterns and ownership as to lands in the vicinity of the proposed PFSF and along the 24 mile access route, including without limitation, homes, outbuildings, corrals and fences, roads and trails, pastures, crop producing areas, water wells, tanks and troughs, ponds, ditches and canals. See 10 C.F.R. §§ 72.90(a) & (c), 72.98(b)

Castle Rock Petition at 62. The asserted bases for the contention are set forth in a page of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated incorporating the specific allegations in its bases as indicated below:

> The Application violates NRC regulations and NEPA because it fails to describe with particularity, using appropriate maps, land use patterns and ownership as to lands in the vicinity of the proposed PFSF and along the 24 mile access route, including without limitation, homes, outbuildings, corrals and fences, roads and trails, pastures, crop producing areas, water wells, tanks and troughs, ponds, ditches and canals. See 10 C.F.R. §§ 72.90(a) & (c), 72.98(b), in that:
>
> a) PFS fails to discuss in detail the various impacted property rights and owners around the site and along the 24-mile transportation corridor
>
> b) PFS fails to discuss the legal basis for the right of way along the 24-mile transportation corridor
>
> c) PFS fails to identify existing structures that would be impacted by the ISFSI and the various transportation corridors suggested by PFS
>
> d) PFS fails to discuss impacts to existing grazing patterns and rights that would be impacted by the ISFSI and the various transportation corridors proposed by PFS
>
> e) PFS fails to discuss all impacts to those living near to the ISFSI and the proposed transportation corridors
>
> f) The PFS application has "other deficiencies."

2. Applicant's Response to the Contention

In Contention 23, Castle Rock asserts that the application violates NEPA and NRC regulations in that it fails to describe with sufficient detail the land uses that will be

affected by the proposed ISFSI and the transportation corridors. Castle Rock Petition at 62 (citing 10 C.F.R. §§ 72.90(a) and (c), 72.98(b)). Castle Rock raises a number of issues, which we address in turn below.

a) Identification of Impacted Property Rights and Landowners

Castle Rock asserts that the application fails to discuss, in detail, "the various impacted property rights and owners" around the ISFSI and along the proposed transportation corridors. Castle Rock Petition at 62.

This subcontention must be dismissed because it does not include "sufficient information . . . to show that a genuine dispute exists with the applicant on a material issue of law or fact." 10 C.F.R. § 2.714(b)(2)(iii). It does not provide the "supporting reasons for the petitioner's belief" that the application is inadequate. Id. 10 C.F.R. § 72.98(b) requires the Applicant to identify "[t]he potential regional impact due to the construction, operation or decommissioning of the ISFSI." 10 C.F.R. § 72.98(b). "The extent of regional impacts must be determined on the basis of potential measurable effects on the population or the environment from ISFSI . . . activities." Id. (emphasis added). Castle Rock presents no facts, expert opinion, or documentation whatsoever to indicate that the Applicant has neglected any measurable effects of ISFSI construction or operations on regional landowners. Castle Rock Petition at 62-63.

Nor does Castle Rock demonstrate that NEPA or NRC regulations require the ER "to discuss, in detail the various impacted property rights and owners" (Castle Rock Petition at 62) beyond the description of impacts already set forth in the Environmental Report.

Because Castle Rock has failed to provide any factual evidence or supporting reasons that tend to cast doubt on a specified portion of the application, or show that there is some specified omission, this subcontention must be dismissed.

This subcontention must also be dismissed because it ignores relevant material submitted by the Applicant. First, the Environmental Report states that there are only about 36 residents within five miles of the proposed ISFSI site, but nevertheless it identifies a variety of effects that ISFSI construction and operation could potentially have on nearby landowners. See ER at 5.1-5; Chapter 4, §§ 4.1 to 4.1.8. Sections 4.1 to 4.1.8 discuss effects on: geography; land use; demography; ecological resources, such as local flora and fauna; air quality near the site and along the transportation corridors due to construction activities; the socioeconomics of Tooele County; regional historical, cultural, scenic and natural resources including the visual impact of the facility; and noise and traffic levels. Id. §§ 4.1 to 4.1.8. While there will be no radiological effluents from the ISFSI (ER at 6.2-1), Section 4.7 of the Environmental Report discusses the radiological effects of the transportation of spent nuclear fuel in the region stemming from occupational exposure and exposure of members of the public. Id. at 4.7-4 to 6.

Specifically regarding the transportation corridor, even if the Applicant pursues the rail option described in the application (and that option will require the permanent alteration of approximately 52.5 more acres of land than the road option (id. at 4.4-1)), "conventional construction practices will occur within the existing Skull Valley Road right-of-way and . . . no additional land acquisition will be required." Id. at 4.4-1.

> [Moreover,] only minor realignment of range fencing, driveways, and other roadside utilities that are present within the existing Skull Valley Road right-of-way will be required. No relocation of residential, commercial, or industrial structures is anticipated under this alternative."

Id. at 4.4-1 to 2. Furthermore, the Environmental Report goes on to compare the environmental impacts from transporting fuel by rail to those from transporting it by road. Id. at 4.3-1 to 4.4.5. Because Castle Rock ignores all this material, this subcontention must be dismissed.

b) Legal Basis for Transportation Right of Way

Castle Rock asserts that the application fails to discuss, "the legal basis for the right-of-way along the 24-mile transportation corridor." Castle Rock Petition at 63. However, because there is no requirement that an applicant establish ownership or control with respect to property to be used for or related to the proposed facility. See Applicant's Response to Utah Contention T, subpart a, incorporated here. Similarly, the application for and procurement of permits and other licenses may proceed simultaneously with the consideration of the license application by the NRC. See Applicant's Response to Utah Contention T, subpart d.(i), incorporated here. Accordingly, this subcontention should be rejected.

c) Identification of Impacted Structures

Castle Rock asserts that the application fails to "identify existing structures that would be impacted by the various transportation corridors suggested by PFS." Castle Rock Petition at 63.

Like Subcontention (a), this subcontention must be dismissed because it does not include sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. It does not provide the supporting reasons for Castle Rock's belief that the application is inadequate. Castle Rock presents no facts, expert opinion, or documentation to indicate that the Applicant has neglected any measurable effects of the ISFSI on any structures. Castle Rock Petition at 62-63. Because Castle Rock has failed to provide any factual evidence or supporting documents that produce some doubt about the adequacy of the Applicant's assessment of environmental impacts on structures or that provides supporting reasons that tend to show that there is some specified omission from the application, it has failed to demonstrate a genuine dispute with the Applicant on a material issue of fact. Therefore, this subcontention must be dismissed.

This subcontention must also be dismissed because it overlooks relevant material submitted by the Applicant. See Section II.C.2 supra. Subcontention (a), the Environmental Report identifies a variety of environmental effects that ISFSI-related activities will have on the region. See ER §§ 4.1 to 4.1.4; supra Subcontention (a). Regarding specific structures, the Environmental Report describes, for example, noise impacts on two residences on Skull Valley Road. ER at 4.1-15. It also states that the nearest noise-sensitive residential receptor is two miles from the ISFSI site and will not be affected by construction activities. Id. at 4.1-17. It states that the Iosepa Cemetery, the only site eligible for or listed on the National Register of Historic Places, will be unaffected by ISFSI-related activities and that no impacts will occur on any other historic,

architectural, or cultural features in the region. Id. at 4.1-18. Because Castle Rock has ignored this information, this subcontention must be dismissed.

d) Impacts on Grazing Patterns and Rights

Castle Rock asserts that the application fails to discuss "impacts to existing grazing patterns and rights that would be impacted by the various transportation corridors proposed by PFS." Castle Rock Petition at 63.

This subcontention must be dismissed because it provides neither a "concise statement of the alleged facts or expert opinion" in its support nor "references to . . . specific sources and documents . . . on which the petitioner intends to rely to establish [the] facts or expert opinion" on which it bases its contention. 10 C.F.R. § 2.714(b)(2)(ii). Castle Rock refers to no facts, expert opinion, or documents to support a claim that the ISFSI or the transportation corridor will have any impact on grazing patterns or rights. See Castle Rock Petition at 62-63. Moreover, it provides no basis for its unsupported allegation that the Applicant's assessment of the effects of the project on grazing is inadequate. See id. The Castle Rock subcontention is devoid of a factual basis and thus it must be dismissed.

This subcontention must also be dismissed because it overlooks relevant material submitted by the Applicant. The Environmental Report characterizes the local pattern of land use for the grazing of cattle and sheep. ER at 2.2-2. It states that the only impact the ISFSI will have on grazing is the removal of 820 acres (the Owner Controlled Area (ER at 2.1-2)) of potential grazing land from use. ER at 4.2-1. This represents "less than 0.5

percent of the 271,000 acres of rangeland in Skull Valley, the majority of which is characterized as of fair to poor quality." Id. The Environmental Report also states that the use of water at the site will have no impact on the few downgradient stock watering wells because of their distance from the site and the size of the aquifer. Id. at 4.2-4. Sections 7.3 and 7.6 of the SAR demonstrate that offsite radiation doses to individuals (and animals) at the site boundary will be insignificant. SAR §§ 7.3, 7.6. "[I]t is generally agreed that the [radiation exposure] limits established for humans are also conservative for other species." Public Service Company of Indiana, Inc. (Marble Hill Nuclear Generating Station, Units 1 and 2), LBP-77-52, 6 NRC 294, 305 (1977); The Toledo Edison Company (Davis-Besse Nuclear Power Station, Units 2 and 3), LBP-75-75, 2 NRC 993, 1006 (1975). The Environmental Report shows that even the worst-case, non-credible accident at the ISFSI would cause a member of the public offsite to receive a maximum radiation dose of less than 200 mrem. ER at 5.1-5 to 6. Thus, radiation effects on animals would also be negligible. Because Castle Rock ignores all this information, this subcontention must be dismissed.

e) Impacts on Residents

Castle Rock asserts that the application fails to discuss "all impacts to those living near to the proposed transportation corridors." Castle Rock Petition at 63.

Like Subcontentions (a) and (c), this subcontention must be dismissed because it does not include sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. 10 C.F.R. § 2.714(b)(2)(iii). It does not

provide the supporting reasons for Castle Rock's belief that the application is inadequate. Id. The Applicant must identify the potential regional impact of the ISFSI on the basis of potential measurable effects. 10 C.F.R. § 72.98(b). Castle Rock presents no facts, expert opinion, or documentation to indicate that the Applicant has omitted any measurable effects on any individuals. Castle Rock Petition at 62-63. Because Castle Rock has failed to provide any factual evidence or supporting documents that produce some doubt about the assessment of effects on individuals or that provides supporting reasons that tend to show that there is some specified omission from the application, it has failed to demonstrate a genuine dispute with the Applicant on a material issue of fact. Turkey Point, LBP-90-16, 31 NRC at 521 n.12. Therefore, this subcontention must be dismissed.

Moreover, this subcontention must be dismissed because it overlooks relevant material submitted by the Applicant. See, e.g., Vogtle, LBP-91-21, 33 NRC at 424; Rancho Seco, LBP-93-23, 38 NRC at 247-48. The same way the Environmental Report discusses the potential environmental impacts on local landowners, it discusses potential impacts on local residents. See, supra, Subcontention (a). Because Castle Rock has ignored all this material, this subcontention must be dismissed.

f) Other Deficiencies

Castle Rock assets that the application has "other deficiencies" in that it "suffers generally from an overall defect of failing to comply with [10 C.F.R. § 72.98(b)] and similar NRC/NEPA requirements by a simple lack of detail with respect to existing land

uses that will be impacted by both the PFSF itself and the proposed 24-mile transportation corridor." Castle Rock Petition at 62-63.

This subcontention must be dismissed for not containing "a specific statement of the issue of law or fact to be raised or controverted" (10 C.F.R. § 2.714(b)(2)) and "references to the specific portions of the application . . . that the petitioner disputes" (10 C.F.R. § 2.714(b)(2)(iii)). A Board may not admit, for any reason, a contention that fails to meet the specificity requirements of 10 C.F.R. § 2.714(b)(2). Duke Power Company (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 NRC 460, 467 (1982), vacated in part on other grounds, CLI-83-19, 17 NRC 1041 (1983). In this subcontention Castle Rock does not identify the "other deficiencies" in the Governmental Report nor the parts of the application that are allegedly defective. See Castle Rock Petition at 63. Thus the subcontention is nonspecific and must be dismissed.

This subcontention must also be dismissed because it provides neither a concise statement of the alleged facts or expert opinion in its support nor references to specific sources and documents to establish the facts or expert opinion. 10 C.F.R. § 2.714(b)(2)(ii). Castle Rock refers to no facts, expert opinion, or documents to support a claim that the Applicant has wrongly omitted any details from the Environmental Report or has overlooked any environmental effects. See Castle Rock Petition at 62-63. Thus this subcontention is devoid of factual basis and must be dismissed.

X. Castle Rock Contention 24: Incorporation by Reference

Castle Rock Contention 24 states in its entirety that:

> Petitioners Castle Rock and Skull Valley Co. by this reference adopt in its entirety each and every contention filed by the State of Utah and incorporate each herein by this reference.

For the reasons set forth in section II.E supra, the Board should reject this contention.

VI. OGD CONTENTIONS

A. OGD Contention A: Lack of Sufficient Provisions for Prevention of and Recovery from Accidents.

OGD has filed 16 contentions[90] to which the Applicant responds as set forth below.

1. The Contention

OGD alleges in Contention A that:

> The license application poses undue risk to pub[l]ic 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.

OGD Petition at 1-2. The asserted bases for the contention are set forth in four pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its bases below:

> The license application poses undue risk to public health and safety because it lacks sufficient provisions for

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[90] See Ohngo Gaudadeh Devia's Contentions Regarding the Materials License Application of Private Fuel Storage in an Independent Spent Fuel Storage Installation (hereinafter "OGD Petition") dated November 24, 1997.

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 in that:

a) License application is deficient because it does not include a comprehensive risk assessment to identify the full range of accidents which could occur at the PFSF. A comprehensive risk assessment must also be performed for the Intermodal Transfer Facility.

b) License application is deficient because it does not address the impact of human error or insider sabotage as a cause of or contribution to accidents. The license application is also deficient because it does not consider human errors in the planning of the facility in evaluating accident risks.

c) License application is deficient because the PFSF does not include a hot cell to unload, replace, and reload a damaged fuel canister. It is unreasonable to presume that facility could operate for 20 or more years and handle 40,000 MTU without the need for a hot cell.

d) Even if no accidents occur, the risk of accidents will adversely affect members of OGD.

In addition to the contention, OGD also petitions the Commission to require PFS to implement a series of seven measures "to minimize accident risks, and to mitigate the impacts of any accidents and incidents" in the event the Commission grants a license to PFS. OGD Petition at 5. OGD's petition must be dismissed as a premature request for the Commission to impose license conditions. It is based on the presumption that it will prevail on its contention which, assuming the contention were admitted, would only be determined after hearing. OGD does not represent that the seven measures are to be considered as a contention for litigation in this proceeding. Nor could it, since it plainly

does not meet the pleading requirements of 10 C.F.R. § 2.714(b) in that, among other failings, it is totally devoid of any supporting basis.

2. Applicant's Response to the Contention

OGD raises several issues under its Contention A. We address in turn below each of the specific allegations raised by OGD in Contention A as set forth above. The generalized assertion in the Contention regarding the specific events of "fire, cask drop and bend, lid drop damage and/or improper welds" (id. at 1-2 (emphasis added)), is not explained, supported, or discussed any further by the bases for the contention. The simple mention of these events is far too generalized and unsupported to establish a litigable contention under the Commission's regulations. The specific issues that are addressed in the bases, including risk assessment, human error, insider sabotage, and need for a hot cell, are addressed herein. We address in turn below each of the specific allegations raised by OGD in Contention A as set forth above.

a) The Application Fails to Include a "Comprehensive Risk Assessment" of the PFSF and the Intermodal Transfer Facility

As set forth above, OGD alleges that the license application is deficient because it does not include a "comprehensive risk assessment" to identify the "full range of accidents" which could occur at the PFSF. See OGD Petition at 2. OGD further asserts that such an assessment must also be performed for the Intermodal Transfer Point. See id.

OGD's assertion that the license application is deficient because it does not include a "comprehensive risk assessment" for the PFSF must be rejected both for failure

to provide a sufficient basis for a litigable contention, pursuant to 10 C.F.R. § 2.714(b), and as an impermissible collateral challenge to the Commission's regulations, pursuant to 10 C.F.R. § 2.758. OGD's contention implies that a "comprehensive risk assessment" is required as part of an ISFSI license application under 10 C.F.R. Part 72, and therefore the Applicant's License Application is deficient because it does not include such an assessment. "Comprehensive risk assessment" (CRA), invented by the author of the report relied upon by OGD, is a proposed type of risk analysis that appears to be above and beyond the scope of a "probabilistic risk assessment." See Golding & White, Guidelines on the Scope, Content, and Use of Comprehensive Risk Assessment in the Management of High-Level Nuclear Waste Transportation 1,1 (1990) (Exhibit 1 of OGD's Petition, cited in OGD Petition at 2). There is no NRC regulatory basis for a "comprehensive risk assessment." There is no requirement in the Commission's regulations for an ISFSI license applicant to include a "comprehensive risk assessment" as part of the part 72 license application. See generally 10 C.F.R. Part 72. OGD's contention does not even allege that such a regulation exists. The question for the Licensing Board is whether there is any basis for requiring a "comprehensive risk assessment" under the Commission's regulations. Applicant's view is that there is none.

The documents cited by OGD in their contention (and included as Exhibits 1 and 2 to OGD's Petition) do not lend any support to OGD's assertion that a "comprehensive risk assessment" is a Commission requirement. First, Exhibit 1 to OGD's Petition specifically addresses the use of a "comprehensive risk assessment" for high-level

nuclear waste transportation, and does not address spent fuel storage. See, e.g., Exhibit 1 to OGD's Petition at 1, 37.

OGD's Exhibit 1 identifies no Commission regulations whatsoever that would require such an assessment. Exhibit 1 concludes that "[a] CRA should be used as a risk management tool," "should be developed prior to construction of the HLNW transportation system," and "should be used interactively throughout the operational phase of the system," and not that a "comprehensive risk assessment" is required even in the transportation arena. Id. at 38 (emphasis added). It is not clear from OGD's contention that a "comprehensive risk assessment" even exists. OGD does not indicate that a "comprehensive risk assessment" has ever been used anywhere, nor does OGD's reference document, Exhibit 1.

The second document referenced by OGD in support of this Contention is also specifically addressed to transportation, and not storage. See e.g., Freudenburg, Organizational Management of Long-Term Risks: Implications for Risk and Safety In the Transportation of Nuclear Wastes 1, 38 (1991) (Exhibit 2 of OGD's Petition, cited in OGD Petition at 3). This report also fails to identify any Commission regulations that would require a risk assessment like a "comprehensive risk assessment" for an ISFSI license application. See generally, id. The stated purpose of this second report,

> to examine whether or not it would be prudent for the citizens and the state of Nevada simply to assume that even "official" DOE risk assessments, such as the transportation risk assessment in the 1986 Yucca Mountain Environmental Assessment, or future estimates of the risks of nuclear waste transportation, can safely be assumed to be reasonable approximations of the "real" risks[,]

(id. at 40), is not even relevant to this proceeding, because it sheds no light on the Commission's requirements for ISFSI licensing under 10 C.F.R. Part 72.

OGD's assertion that the Applicant's License Application must include a "comprehensive risk assessment" is not grounded in, or supported by, any Commission regulation. This contention must therefore be rejected as advocating stricter requirements than imposed by the regulations and therefore an impermissible attack on the Commission's regulations. See Section II.B supra at 5-7. Further, this contention must be rejected for failure to meet the basis and specificity requirements for a litigable contention.

OGD also alleges that the License Application must include a "comprehensive risk assessment" for the Intermodal Transfer Point. See OGD Petition at 2. As for the PFSF as discussed above, no Commission regulation requires an ISFSI license application to include a "comprehensive risk assessment." Nor does OGD's contention identify or allege the existence of any such regulation. Furthermore, as discussed at length in the Applicant's response to Utah Contention B, no specific license is required for the intermodal transfer operation. The intermodal transfer operation is within the scope of the general license under 10 C.F.R. § 71.12. See id. OGD's contention that the license application must include a "comprehensive risk assessment" for the intermodal transfer operation "advocate[s] stricter requirements than are imposed by the regulations" and must be rejected as an impermissible collateral attack on the Commission's regulations. Moreover, it must be rejected as being beyond the scope of this proceeding, which concerns PFS's "application . . . for a materials license, under the provisions of 10

C.F.R. Part 72," to store spent nuclear fuel "in an . . . (ISFSI) located on the Skull Valley Goshute Indian Reservation." See Section II.B supra at 8.

b) License Application Fails to Address Human Error or Insider Sabotage as A Cause of Accidents

As set forth above, OGD alleges that the license application is deficient because it does not address the impact of human error or insider sabotage as a cause of or contribution to accidents. See OGD Petition at 2. OGD also asserts that the license application is deficient because it does not consider human errors in the planning of the facility in evaluating accident risks. See id. at 3.

A contention that mistakenly claims that the applicant did not address a relevant issue in the license application must be dismissed. See Section II.C.2 supra. In setting forth a contention pursuant to 10 C.F.R. § 2.714(b), a petitioner is required to "read the pertinent portions of the license application, including the Safety Analysis Report and the Environmental Report, state the applicant's position and the petitioner's opposing view." 54 Fed. Reg. 33,168, 33,170 (1989) (Commission discussing its revised, higher threshold for admissibility of contentions).

OGD's assertion that the license application does not address the impact of human error as a cause of or contribution to accidents ignores relevant portions of the license application, and is mistaken. See OGD Supp. Petition at 2. Contrary to OGD's assertion, the License Application does address the impact of human error as a cause or contribution to accident events. As set forth below, human error is considered in the off-normal and accident scenarios in the license application. Off-normal and accident events considered

in the PFSF license application are defined and evaluated in Chapter 8, "Accident Analysis," of the Safety Analysis Report. See SAR at 8.1-1.

For example, Section 8.1.3 of the Safety Analysis Report assumes and analyzes the consequences of human error causing the failure to identify and remove blockage of half of the storage cask inlet air ducts and the storage cask is presumed to reach a maximum steady-state temperature assuming the blockage is never removed. Id. at 8.1-10.

Section 8.1.4 of the Safety Analysis Report evaluates the off normal condition of "Operator Error." Id. at 8.1-11. This analysis explicitly addresses human error in load handling at the PFSF as the off-normal condition. See id. In this analysis, "[s]everal postulated events involving off-normal handling have been considered, all caused by personnel error." Id. (emphasis added).

Section 8.1.5 of the Safety Analysis Report evaluates the off normal condition of "Off-Normal Contamination Release" from the surface of a sealed canister. SAR at 8.1-16. While contamination of the canister surface is not expected to occur, this analysis assumes human error results in all of these precautionary measures being overlooked or erroneously performed by the operators at the originating power plant, such that the surface of the canister is contaminated when it arrives at the PFSF. See id. The analysis further assumes that human error results in operators at the PFSF overlooking the contamination and then handling the canister rather than immediately returning it to the originating power plant for decontamination. See id. at 8.1-16 to 17.

The accident conditions analyzed in Section 8.2 of the Safety Analysis Report include the evaluation of "[h]ypothetical accidents" that are not considered credible at the PFSF. See id. at 8.2-1. Section 8.2.8 of the Safety Analysis Report evaluates the hypothetical accident condition of "100% Blockage of Air Inlet Ducts." Id. at 8.2-44. While this event has no credible causes at the PFSF, the analysis nevertheless assumes that because of human error the complete blockage of cask air inlet ducts and resulting increase in cask temperatures is not detected, identified, or removed for almost four days, regardless of the continuous temperature monitoring, alarms, and periodic inspections. See id. at 8.2-44 to 46.

OGD's contention neither addresses, nor challenges the validity of, any of these scenarios and their analyses. OGD's contention fails to identify any scenario caused by human error that is not taken into account in the license application. OGD's contention cites no regulatory basis or support to show that the Applicant has not adequately considered human error as a causative factor in the scenarios the Applicant has evaluated in the Safety Analysis Report.

Finally, regarding human error at ISFSIs, the Commission observed the following in the Waste Confidence rulemaking:

> Unlike the accident at the Three Mile Island reactor, human error at a spent fuel storage installation does not have the capability to create a major radiological hazard to the public. The absence of high temperature and pressure conditions that would provide a driving force essentially eliminates the likelihood that an operator error would lead to a major release of radioactivity . . . .In addition, features incorporated in storage facilities are designed to mitigate

> the consequences of accidents caused by human error or otherwise.

Rulemaking on the Storage and Disposal of Nuclear Waste (Waste Confidence Rulemaking), CLI-84-15, 20 NRC 288, 365 (1984). OGD's contention does not address or challenge this finding by the Commission.

OGD's contention that the Applicant's License Application does not take into account human error as a cause of, or contribution to, accidents must be rejected for mistakenly claiming that the Applicant did not address a relevant issue in the License Application, and for failure to provide a sufficient regulatory or factual basis to support its assertion and establish an admissible contention.

OGD's contention also mistakenly claims the license application does not address insider sabotage as a cause of or contribution to accidents. See OGD Petition at 2. Insider sabotage is an integral part of the Commission's design basis threat for radiological sabotage for an ISFSI. See 10 C.F.R. § 73.1(a)(1). Specifically, the design basis threat includes:

> inside assistance which may include a knowledgeable individual who attempts to participate in a passive role (e.g., provide information), an active role (e.g., facilitate entrance and exit, disable alarms and communications, participate in violent attack), or both.

Id. (emphasis added). This design basis threat, including the threat from "insider sabotage" is explicitly required to be included in the ISFSI physical security plan, which is required to "demonstrate how the applicant plans to comply with the applicable requirements of Part 73," including the design basis threat for radiological sabotage in 10

C.F.R. § 73.1. 10 C.F.R. § 72.180 ("Physical security plan"). Insider sabotage is addressed as part of the design basis threat for radiological sabotage in the Applicant's security plan. OGD's assertion that the license application does not address insider sabotage must be rejected for mistakenly claiming that the Applicant did not address a relevant issue.

OGD's contention that the License Application must consider human errors in the planning of the facility when evaluating accident risks must be rejected as a collateral attack on the Commission's regulations and regulatory framework. See 10 C.F.R. § 2.758. OGD's contention asserts that license application must evaluate the effect of human errors (including intentional human actions such as insider sabotage) during the planning of the facility, for example in "facility and equipment design" and "preparation of the facility license application." See OGD Petition at 3. OGD's contention cites no Commission regulation in support of this proposition.

The Applicant has established and implemented a quality assurance program to ensure the quality of the design and construction and the operation of the Facility. See LA at 6-1; SAR at 11.1-1. The quality assurance program specifically guards against human error in, *inter alia*, design; document preparation and control; control of materials, equipment, and services; and inspecting and testing equipment and systems. See id. The quality assurance program therefore covers all of the areas addressed in OGD's contention. See OGD Petition at 3. OGD's contention does not address or challenge the adequacy of PFS's quality assurance program. OGD's contention does not allege that PFS has not properly implemented its quality assurance program in the design

and preparation of the License Application for the PFSF. OGD may not assert that PFSF will not implement its quality assurance program because a petitioner may not assert than an NRC licensee will violate NRC regulations without "some particularized demonstration that there is a reasonable basis to believe that [the licensee] would act contrary to their explicit terms." General Public Utilities Nuclear Corporation (Oyster Creek Nuclear Generating Station), LBP-96-23, 44 NRC 143, 164 (1996). OGD makes no such demonstration here. Therefore, OGD's contention must be dismissed for failure to establish a sufficient basis for a litigable contention as required by 10 C.F.R. § 2.714(b).

c) License Application is Deficient because the PFSF Does Not Include a Hot Cell

As set forth above, OGD alleges that the license application is deficient because the PFSF does not include a hot cell to unload, replace, and reload a damaged fuel canister. See OGD Petition at 4. OGD further asserts that it is unreasonable to presume that facility could operate for 20 or more years and handle 40,000 MTU without the need for a hot cell. See id. As set forth in Applicant's response to Utah Contention J, a hot cell is not required under NRC regulations for an ISFSI such as the PFSF and this contention must be dismissed as seeking to litigate a generic determination established by Commission rulemaking among other grounds.[91]

d) Even if no Accidents Occur, the Risk of Accidents Will Adversely Affect Members of OGD

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[91] Applicant incorporates its response to Utah Contention J.

As set forth above, OGD contends that even if no accidents occur, the risk of accidents alone will adversely affect members of OGD. See OGD Petition at 4. OGD alleges that the "physical presence of the facility" will constantly "remind OGD members of these risks." Id. OGD provides no background, discussion, expert opinion, reference documentation, or any basis of any sort for its assertion of psychological harm from the mere presence of the Applicant's facility. This contention must be dismissed for failure to provide a sufficient basis for an admissible contention. See 10 C.F.R. § 2.714(b). Furthermore, the Commission and the United States Supreme Court have explicitly recognized that psychological harm from the mere presence of a nuclear facility is outside of the zone of interest protected by the Atomic Energy Act ("AEA") and the National Environmental Policy Act ("NEPA"), the statutes under which the NRC holds licensing hearings. Metropolitan Edison Company (Three Mile Island Nuclear Station, Unit No. 1), CLI-82-6, 15 NRC 407, 408 (1982) (AEA); Metropolitan Edison Company v. People Against Nuclear Energy, 460 U.S. 766, 772 (1983) (NEPA). OGD's contention alleging psychological harms from the presence of the PFSF must be rejected because it is not a cognizable basis for an admissible contention in a Commission licensing proceeding.

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B. OGD Contention B: Emergency Plan Fails to Address the Safety of Those Living Outside of the Facility

1. The Contention

OGD alleges in Contention B that:

> 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 resident on notice of an accident.

OGD Petition at 6. The asserted bases for the contention are set forth in two pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, Applicant proposes that the contention be restated as follows, incorporating the specific allegations in its bases:

> 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 in that (a) 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 and does not address a warning system such as would be implemented to put the residents on notice of an accident. Further:
>
> a) PFS has not indicated how it will comply with Emergency Planning and Community Right to Know Act as required by 10 C.F.R. § 73.32.
>
> b) PFS has failed to show commitment and means to promptly notify offsite response organizations and request assistance.
>
> c) The license application fails to deal with unavailability of personnel, parts of facility and some equipment should an accident occur, as required by 10 C.F.R. § 72.32(8).

2. Applicant's Response to the Contention

OGD raises a number of issues under Contention B which we address in turn below.

a) EP Provisions for People Living Off the ISFSI Site

OGD asserts that "the license application . . . fails to address the safety provisions made for those individuals living . . . within a five mile radius of the facility" and fails to provide for an offsite "warning system . . . to put the residents on notice of an accident." OGD Petition at 6.

This subcontention must be dismissed as "an impermissible collateral attack on the Commission's rules" for "advocat[ing] stricter requirements than those imposed by the regulations." A licensee of an ISFSI that will not "process and/or repackage spent fuel," -- such as Applicant's proposed ISFSI[92] --is not required to have an offsite component to its emergency plan. 60 Fed. Reg. 32,430, 32,442 (1995) (10 C.F.R. § 72.32, Statement of Considerations); Northern States Power Company (Independent Fuel Storage Installation) Director's Decision under 10 C.F.R. § 2.206 (DD-97-24), 62 Fed. Reg. 51,916, 51,917 (1997). This is because the NRC has found that "the postulated worst-case accident involving an ISFSI has insignificant consequences to the public health and safety." 60 Fed. Reg. at 32,431, 32,436. Under 10 C.F.R. § 72.32(b), the emergency plan for an ISFSI that does not "process and or repackage spent fuel" need only have a system for classifying accidents as "alerts." 10 C.F.R. § 72.32(b). An

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[92] The Applicant will neither process nor repackage spent fuel at the ISFSI. LA at 1-1; compare 10 C.F.R. § 72.32(a) with 10 C.F.R. § 72.32(b).

"Alert" is the proper classification for events "not likely to spawn radiation consequences outside the site boundary." Curators of the University of Missouri (Trump-S Project), CLI-95-11, 42 NRC 47, 48 (1995) (citing 10 C.F.R. §§ 40.4, 70.4) (emphasis added).

In short, under the applicable regulations, based on the Commission's generic determination that postulated worst case accidents for ISFSIs that do not process or package spent fuel have "insignificant consequences to the public health and safety," Applicant's emergency plan does not need to contain provisions for addressing potential harm to individuals living offsite but within five miles of the facility. Nor, therefore, does it need to address the provision of an offsite warning system. Thus, these general contentions must be dismissed.

b) Compliance with EPCRTKA

OGD alleges that the Emergency Plan has not indicated how the Applicant plans to comply with Emergency Planning and Community Right to Know Act of 1986 ("EPCRTKA") with respect to hazardous materials at the ISFSI. OGD Petition at 6 (citing 10 C.F.R. § 72.32).

This subcontention must be dismissed because it mistakenly claims that the Applicant failed to address a relevant issue in the application. EPCRTKA applies only to facilities possessing "extremely hazardous substances" in amounts above specified regulatory thresholds. It does not require an Applicant to do anything regarding "hazardous materials" that might be present at the ISFSI. 40 C.F.R. § 355.30(a); Title II, Pub. L. No. 99-499, § 302, 100 Stat. 1613, 1730 (1986). The Emergency Plan states that

"[t]he PFSF will not have extremely hazardous substances present in an amount equal to or greater than the threshold planning quantities of 40 C.F.R. § 355. EP at 2-6. The threshold planning quantities for each extremely hazardous substance designated under EPCRTKA are given in 40 C.F.R. § 355, Appendices A and B. 40 C.F.R. § 355, App. A & B. The quantities range from 1 to 10,000 pounds. Id. The lesser of the two quantities given for each substance applies only if the substance is powdered, in solution, molten, or meets National Fire Protection Association ratings of 2, 3, or 4 for reactivity. 40 C.F.R. § 355.30(e)(2)(i).

Moreover, OGD provides no factual basis for its allegation that the ISFSI will possess regulated substances of any kind. OGD Petition at 6. It has supplied no factual basis of facts or expert opinion with supporting references. Therefore, the Emergency Plan does address EPCRTKA; that Act does not apply, and this subcontention must be dismissed.

c) Notification of Offsite Response Organizations

OGD alleges that Applicant has failed to show a commitment, and a means, to promptly notify and request assistance from offsite emergency response organizations. OGD Petition at 6. OGD also alleges that Applicant has not provided backup for the communication means necessary to notify and request assistance from offsite response organizations. Id. (citing 10 C.F.R. § 72.32).

This subcontention must be dismissed because it too mistakenly claims that the Applicant failed to address a relevant issue in the application. The Environmental Plan

states that "[w]hen an Alert is declared or terminated, the [ISFSI] Emergency Response Leader shall designate an Emergency Communicator and ensure that notifications are promptly made to: [1)] Tooele County . . . , [2)] the NRC Operations Center . . . , and 3) [other] [o]ffsite response organizations, as appropriate." ER at 5-2. In the event of an emergency, assistance from offsite emergency response organizations will be requested "at the discretion of the [ISFSI] Emergency Response Leader." Id.; see Northern States Power, DD-97-24, 62 Fed. Reg. at 51,917 (relevant offsite response organizations are those from which the Applicant expects to request assistance). Thus, the Emergency Plan does include a commitment to promptly notify appropriate offsite emergency response organizations.

Further, the Emergency Plan provides the means for such notification, with both primary and backup communications systems. It states that the Emergency Communicator shall ensure that notification in an alert will be provided to: "Tooele County, by commercial telephone lines or backup radio communication as soon as possible." EP at 5-2. The Emergency Plan also states that "[b]ackup communications equipment include facility radios and cellular telephones." Id. OGD simply ignores the information in the Application. Therefore, this subcontention must be dismissed.

d) Unavailability During an Accident of Personnel and Equipment

OGD claims that the Application fails to deal with the unavailability of personnel, parts of the facility, and some equipment in the event of an accident. OGD Petition at 6 (citing 10 C.F.R. § 72.32(a)(8)).

This subcontention must also be dismissed for not containing a specific statement of the issue of law or fact to be raised or controverted. OGD does not indicate at all which personnel, parts of the facility, or pieces of equipment might be unavailable or which of them are not addressed by the Emergency Plan. OGD Petition at 6. Thus, the subcontention is nonspecific and must be dismissed.

This subcontention must also be dismissed because it ignores that the Applicant addressed a relevant issue in the application. The Emergency Plan provides for emergency notification in the event of the unavailability of some personnel in that it specifically addresses emergency notification during off-shift hours. EP at 5-1. It also addresses the notification of ISFSI emergency response personnel who are otherwise offsite. Id. Furthermore, it provides for requesting assistance from offsite emergency response organizations to supplement the ISFSI staff if necessary. Id. at 5-2. The Emergency Plan provides for the unavailability of part of the facility and some equipment as the emergency response Control Point has a primary location in the Security and Health Physics Building and a secondary location in the Operations and Maintenance Building. Id. at 5-9. The primary assembly area for personnel evacuated from the restricted area is the Administration Building, while the secondary area is in the Operations and Maintenance Building. Id. at 5-6. Radiation monitoring equipment is located in both the Security and Health Physics Building and the Administration Building. Id. at 5-4. The Emergency Plan provides for backup communications systems. Id. at 5-9; see also Subcontention (c), supra. It provides for backup power for the onsite intercom. EP at 5-1. Thus, Applicant has clearly provided for the unavailability of

personnel, different areas within the facility, and facility equipment. OGD again ignores this information and provides no basis for challenging it. Therefore, this subcontention must be dismissed.

C. OGD Contention C: License Application Lacks Sufficient Provisions for Protection Against Transportation Accidents.

1. The Contention

The OGD petitioner alleges in Contention C that:

> 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.

See OGD Petition at 6-7. The asserted bases for the contention are set forth in several pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, Applicant proposes that the contention be restated incorporating the specific allegations raised in its bases as follows:

> 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 in that:
>
> a) the license application lacks sufficient provisions for protection against transportation accidents.
>
> b) the design of the shipping casks do not provide sufficient protection against a criticality accident during transportation.
>
> c) the license application does not provide sufficient measures for protection of shipping casks during the harsh summer temperatures and sub-zero winter temperatures.

d) the license application fails to provide sufficient information to fully evaluate the impacts and risks of spent nuclear fuel transportation to PFS. The absent information is the detailed inventory of specific radionuclides expected to be present in the typical fuel assembly received at PFS and the anticipated shipment characteristics necessary for evaluation of transportation impacts and risks.

e) the license application fails to adequately analyze routine transportation conditions in that the license application fails to consider the radiological risks of routine transportation by rail and heavy-haul truck and ignores the potentially significant radiation exposures which members of OGD and other residents of Skull Valley may receive as a result of gridlock traffic incidents involving heavy-haul truck shipments from the intermodal transfer point to the canister transfer building.

f) the license application fails to adequately analyze transportation accident conditions in that:

(i) the license application fails to consider the historical records of spent nuclear fuel transportation accidents and incidents.

(ii) the license application fails to consider the risks of severe accidents and terrorist attacks which could result in significant radiological releases. The license application ignores the potentially severe consequence of a successful terrorist attack against a spent fuel shipping cask using a high energy explosive device or an anti-tank weapon. Radioactive contamination from a terrorist incident could spread beyond the site of the attack.

(iii) the license application fails to consider the ways in which human errors or insider sabotage could cause or exacerbate transportation accidents.

(iv) the license application ignores the accident rate analysis prepared by DOE and 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.

(v) 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 by general freight service and by dedicated train service.

g) the license application fails to consider the traumatic collective impact of transportation risks on members of OGD who seek to preserve their traditional life style.

In addition to the contention, OGD also petitions the Commission to require PFS to implement a series of nine measures regarding transportation of spent fuel to the PFSF in the event the Commission grants a license to PFS. OGD Petition at 15-16. OGD's petition must be dismissed as a premature request for the Commission to impose license conditions. It is based on the presumption that it will prevail on its contention which, assuming the contention were admitted, would only be determined after a hearing. OGD does not represent the measures of its petition to be considered as a contention for litigation in this proceeding. Nor could it. It plainly does not meet the pleading requirements of 10 C.F.R. § 2.714(b) in that, among failing to meet other requirements, it is totally devoid of any supporting basis.

2. Applicant's Response to the Contention

OGD raises a number of issues under Contention C, which Applicant addresses in turn below:

a) Lacks provisions for protection against transportation accidents

OGD asserts that Applicant's License Application "poses undue risk to public health and safety because it lacks sufficient provisions for protection against transportation accidents." OGD Petition at 6-7. Applicant identifies applicable accidents

in the Emergency Plan Chapter 2. The requirements for emergency plans for ISFSIs are for on-site emergencies only. See Northern States Power Co. (Independent Fuel Storage Installation) Director's Decision under 10 C.F.R. § 2.206 (DD-97-24), 62 Fed. Reg. 51,916, 51,917 (1997). An on-site emergency does not include a spent fuel transportation accident that occurs off-site, to the extent that it has no effect on the site.[93] The safety aspects of off-site transportation of spent fuel, including measures to address spent fuel transportation accidents, are controlled by 10 C.F.R. Parts 71 and 73, and by DOT regulations, not by 10 C.F.R. Part 72. See, e.g., 10 C.F.R. §§ 71.5, 73.37. A 10 C.F.R. Part 72 materials licensing proceeding is not the proper forum to address off-site transportation spent fuel accidents. Hence, this contention must be dismissed as being beyond the scope of this proceeding. See also Applicant's Response to OGD Contention M.

b) Design of shipping casks not sufficient to protect against criticality accident

OGD asserts that Applicant's License Application "poses undue risk to public health and safety because it lacks sufficient provisions for protection against transportation accidents, including a criticality accident" in that "[t]he design of the shipping casks do not provide sufficient protection against a criticality accident during transportation." OGD Petition at 6-7. A contention that challenges the capability of a

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[93] Applicant provides further response to its evaluation of the impact of off-site accidents or incidents that effect the site at its response to OGD Contention M. See Applicant's Response to OGD Contention M.

shipping cask to perform its designed and certified function, is a challenge to NRC regulations governing the licensing of such a cask, 10 C.F.R. Part 71. The NRC in promulgating the design and certification requirements for shipping casks has made the generic determination that such casks, including the provisions to protect against accidental criticality at 10 C.F.R. § 71.55 and 10 C.F.R. § 71.59, adequately protect public health and safety of spent fuel while in transit. See 31 Fed. Reg. 9941, 9942 ("Packaging of Radioactive Material For Transport" - Final Rule) (July 22, 1966); 30 Fed. Reg. 15,750 ("Transport of Licensed Material, Notice of Proposed Rulemaking") (December 21, 1965).[94] Therefore, a contention against transporting spent fuel in NRC-approved shipping casks in compliance with applicable regulatory requirements, is a direct challenge to the regulations and the NRC's generic determination made as part of the rulemaking. To be admitted, a contention may not attack a Commission rule or regulation, 10 C.F.R. § 2.758, and therefore such a contention must be dismissed. Furthermore, this proceeding is a 10 C.F.R. Part 72 licensing proceeding. A challenge to a 10 C.F.R. Part 71 license is outside the scope of this case. See Section II.B supra.

Additionally, this contention does not provide any facts or technical analyses to support this claim. Thus this contention must be dismissed.

c) Inadequate protection of shipping casks during the harsh summer temperatures and sub-zero winter temperatures.

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[94] 10 C.F.R. Part 71, "Regulations to Protect Against Accidental Conditions of Criticality in the Shipment of Special Nuclear Material," was originally promulgated in 1958 "to establish appropriate precautions in connection with the transportation of special nuclear material to prevent accidental conditions of criticality." 23 Fed. Reg. 7666 ("Part 71 - Regulations to Protect Against Accidental Conditions of Criticality in the Shipment of Special Nuclear Material" - Final Rule) (October 3, 1958).

OGD asserts that Applicant's License Application "poses undue risk to public health and safety because it lacks sufficient provisions for protection against transportation accidents" in that "the license application [does not] provide sufficient measures for protection of shipping casks during the harsh summers and sub-zero temperatures of winter." OGD Petition at 6-7. As stated above, a contention that challenges the capability of a shipping cask to perform its designed and certified function, is a challenge to NRC regulations governing the licensing of such a cask, 10 C.F.R. Part 71. The NRC in promulgating the design and certification requirements for shipping casks has made the generic determination that such casks, including provisions for thermal extremes at 10 C.F.R. § 71.71 and 10 C.F.R. § 71.73, adequately protect public health and safety of spent fuel while in transit. See 48 Fed. Reg. 36,600, 35,606 ("Rules to Achieve Compatibility with the Transport Regulations of the International Atomic Energy Agency (IAEA)" - Final Rule) (August 5, 1983). Applicant's SAR in Section 3.2.6, "Thermal Loads," and in Table 3.6-1, "Summary of PFS Design Criteria," describes the design ambient conditions for the PFS site at any one time; the thermal conditions range from a minimum of -35°F to a maximum of 110°F at any one time during a day. See SAR at 3.2-5 and Sheet 2 of Table 3.6-1. The NRC design and testing thermal conditions over extended periods of time range from -40°F to 1475°F to cover normal and hypothetical accident conditions. See 10 C.F.R. § 71.71(c) and 10 C.F.R. § 71. 73(c). The NRC also states in the statement of considerations that:

> ... Type B packages do not respond quickly to temperature changes, so a long-term average temperature test is more appropriate than a test which includes temperature extremes.

48 Fed. Reg. at 35,606. See also State of Wisconsin , DPRM-86-5, 24 NRC 647, 652 (1986). Hence, Applicant's thermal design conditions are well within the bounds of the NRC-specified thermal conditions, and here OGD has not challenged Applicant's specified thermal design conditions. Therefore, a contention against transporting spent fuel in NRC-approved shipping casks in compliance with applicable regulatory requirements, is a direct challenge to the regulations and the NRC's generic determination made as part of the rulemaking. To be admitted, a contention may not attack a Commission rule or regulation, 10 C.F.R. § 2.758, and therefore such a contention must be dismissed. In addition, as with the prior contention, this 10 C.F.R. Part 71 issue is outside the scope of this 10 C.F.R. Part 72 licensing proceeding. Finally, OGD has failed to provide any facts, technical analyses or expert opinion to support this claim in its contention. For all these reasons, this contention must be dismissed.

d) Insufficient information to fully evaluate the impacts and risks of spent nuclear fuel transportation.

OGD alleges that Applicant's License Application is deficient because it "fails to provide sufficient information to fully evaluate the impacts and risks of spent nuclear fuel transportation to PFS." OGD Petition at 7. Specifically, OGD contends that (1) "the license application does not provide detailed information about the radiological characteristics of the spent fuel which will be shipped to Skull Valley," id., and (2) "the license application also fails to provide sufficient details about the anticipated shipment characteristics necessary for evaluation of the transportation impacts and risks," id. at 8.

(i) Detailed radiological characteristics of spent fuel.

OGD asserts that "the license application fails to provide the detailed inventory of specific radionuclides expected to be present in the typical fuel assembly received at PFS. Id. The only specific radionuclides addressed in OGD's contention are "the major radionuclides of concern in a transportation accident . . . strontium-90 and cesium-137." Id. OGD provides no regulatory basis whatsoever that such detailed information is required in the License Application. OGD provides no support whatsoever for its assertion.

Nonetheless, Applicant's License Application does provide detailed information about the spent fuel which may be shipped to the PFSF. See, e.g., SAR at 3.1-2 ("Materials to be Stored"), Table 3.1-1 ("Types of PWR Fuel that can be Stored at the PFSF"), Table 3.1-2 ("Types of BWR Fuel that can be Stored at the PFSF"), and Table 3.1-3 ("PFSF Bounding Design Fuel Characteristics"). The spent fuel characteristics provided in the License Application are consistent with the NRC's recommendations for such information in an ISFSI SAR. NRC's guidance is that:

> A detailed description of the physical, thermal, and radiological characteristics of the spent fuel... to be stored should be provided. Include spent fuel characteristics such as specific power, burnup, decay time, and heat generation rates ...

Regulatory Guide 3.48 at 3-1 (emphasis added); see also NUREG-1567 at 3-5 to 3-6. This information is provided in Applicant's License Application. OGD's contention does not address, nor challenge the validity of, the information in the License Application or the NRC's guidance that the SAR include those spent fuel characteristics.

Furthermore, from this data, the specific inventory of each radionuclide can be calculated using the standard ORIGEN-S code that is referenced, and used, in the License Application. See SAR at 8.2-38 ("radionuclide inventories were derived from ORIGEN-S calculations"); see also Calculation Package Vol. II, Tab 18, "Dose From Hypothetical Loss of Canister Confinement Accident," SWEC 05996.01-UR-2, at 6 (1997). In fact, the specific inventories of the only two radionuclides cited in OGD's contention, "strontium-90 and cesium-137," are explicitly calculated and included in the License Application. Id. (Calc. Pack. Tab 18 "Table 2- Radionuclide Inventories in Spent Fuel in Canisters"). OGD neither addresses, nor challenges the validity of, the calculation of the specific inventory of strontium-90 and cesium-137 in the spent fuel at the PFS.

OGD also fails to identify any specific analyses it is unable to do with the spent fuel characteristics included in the License Application. OGD's contention also fails to identify any deficiency in the design or operation of the PFSF in the License Application as a result of the asserted lack of detailed radionuclide inventory information. OGD's contention must be rejected for two reasons. First, ODG's contention ignores the relevant information on spent fuel characteristics and radionuclide inventories (e.g., for strontium-90 and cesium-137) that is included in the License Application. A contention that mistakenly claims that an applicant fails to address a relevant issue in the application must be dismissed. Second, OGD's contention does not provide a sufficient basis for an admissible contention, as required by the Commission's regulation. 10 C.F.R. § 2.714(b). In addition to not addressing the "pertinent portions of the license application,"

OGD has not identified any regulatory basis for its contention, has not identified any problem in the design or operation of the proposed facility related to the alleged lack of data, and has not addressed why the spent fuel data and description of the radionuclide inventory model that are in the License Application are inadequate and cannot be used to generate any needed information on spent fuel characteristics and radionuclide characteristics. OGD's unsupported contention must be dismissed.

(ii) Detailed characteristics of anticipated shipments

OGD asserts that "[t]he License Application also fails to provide sufficient details about the anticipated shipment characteristics necessary for evaluation of transportation impacts and risks." OGD Petition at 8. OGD's contention provides no regulatory basis, or any other basis whatsoever, for this assertion. OGD's contention is accompanied by only a generalized discussion of the potential number of shipments to the PFSF and OGD's "assum[ption] that the average rail shipment distance to Skull Valley will be between 1,500 and 2,000 miles," statement that "[t]he average [heavy-haul truck] loaded shipment distance would be about 25 miles," and statement that "the proposed shipments to Skull Valley would represent an unprecedented increase in the amount of spent fuel shipped ...." OGD Petition at 9. None of these generalized statements establishes a genuine dispute with Applicant. Furthermore, each of these issues (shipments, rail shipment distance, and heavy-haul truck shipment distance) is specifically addressed in Applicant's License Application. See ER at 4.7-5 ("PFSF is expected to receive 100 to 200 fuel shipments ... per year"), 4.7-7 ("Shipping distances by rail to the PFSF will be approximately 2,600 miles from reactors in east coast and

southern states, approximately 1,600 miles from reactors in the central states, and approximately 1,000 miles from reactors in western states"). OGD's contention neither addresses, nor challenges the validity of any of this information in the License Application. OGD's contention must be rejected for failing to provide a sufficient basis for an admissible contention, as required by the Commission's regulations.

e) Failure to consider the radiological risks of routine transportation.

OGD asserts that the License Application "fails to consider . . . the radiological risks of routine transportation," including gridlock traffic incidents and routine rail or highway transportation activities. OGD Petition at 7, 14-15.

Contrary to the State's assertion, since Applicant utilizes Table S-4 to calculate the environmental impacts of spent fuel transportation, Applicant does consider the environmental impacts of routine transportation and postulated transportation accidents. See ER at 4.7-1 through 4.7-9 (incident-free transportation); ER at 5.2-1 through 5.2-3 (postulated transportation accidents); see also Calculation Package Vol. II, Tab 21, "PFSF Transportation Impacts," SWEC Calc. No. 05996.01-P-001 at 4. WASH-1238 considers activities normally incident to transportation is evaluating the environmental impacts of transportation. See WASH-1238 at 5, 110 (discussing vehicle speed as 200 miles/day - - "Based on a uniform distance traveled each day and uniform distribution of persons along the route, the cumulative radiation dose to the population is the same whether the vehicle is moving all of the time at a constant rate of speed or standing still part of the day."). The environmental impacts assessed by Applicant (both routine and accident conditions) are performed in a similar manner as that performed by NRC in

promulgating 10 C.F.R. Part 72. The "Generic Environmental Impact Statement on Handling and Storage of Spent Light Water Reactor Fuel," NUREG-0575, utilizes the information and data in WASH-1238, "Environmental Survey of Transportation of Radioactive Materials To and From Nuclear Power Plants," (and hence Table S-4 from 10 C.F.R. Part 51) in assessing the environmental impacts of spent fuel transportation for an away-from-reactor ISFSI. See NUREG-0575 at 3-21, 4-22; see also, 45 Fed. Reg. at 74,698 (1980). Applicant is relying on Table S-4 in 10 C.F.R. Part 51, which is based on WASH-1238, supplemented with information from NUREG-1437 and NUREG-0170, as the best available data and information to assess environmental impacts of spent fuel transportation that is approved by the Commission for use in a licensing proceeding. OGD does not challenge the methodology implemented by Applicant. Hence, this contention must be dismissed because it does not allege that the application is deficient.

WASH-1238, and hence Table S-4, considers that routine transportation instances including that by intermodal transfer, and hence rail-to-heavy haul truck shipments, may be necessary for radioactive material shipments and addresses the environmental impacts of that transfer. See WASH-1238 at 38, 41 (discussing the option of "intermediate trucking by special equipment to the nearest railhead" and discussing the exposure to carrier personnel or the general public, specifically mentioning "transshipment, e.g., when the cask is transported by truck from the reactor to a nearby railhead and transferred from the truck to a railroad car."). A contention that mistakenly claims that an applicant fails to address a relevant issue in the application must be dismissed. Thus, this contention must be dismissed.

f) Failure to adequately analyze transportation accident conditions in that the license application:

(i) Fails to consider the historical records of spent nuclear fuel transportation accidents and incidents.

OGD alleges that the License Application fails to adequately analyze transportation accident conditions[95] in that it "fails to consider the historical records of spent nuclear fuel transportation accidents and incidents." OGD Petition at 7, 9. The regulation requiring Applicant to evaluate spent fuel transportation does not require Applicant "to consider the historical records of spent nuclear fuel transportation accidents and incidents." Id. The regulation states that:

> The proposed ISFSI or MRS must be evaluated with respect to the potential impact on the environment of the transportation of spent fuel or high-level radioactive waste within the region.

10 C.F.R. § 72.108. OGD's contention is invalid in that OGD inappropriately "advocates stricter requirements than those imposed by the regulations."

As stated above in Applicant's Response to OGD C subsection (e), since Applicant utilizes Table S-4 to calculate the environmental impacts of spent fuel transportation, the License Application does consider the environmental impacts of routine and accident transportation associated with shipping spent fuel to and from the PFS. See Applicant's Response to OGD Contention C Subpart (e). This is another instance of a contention that mistakenly claims that Applicant failed to address a relevant issue in the application -- and was wrong. Thus, this contention must be dismissed.

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[95] Applicant provides further response to its evaluation of the impact of transportation accidents at its response to OGD Contention M. See Applicant's Response to OGD Contention M

(ii) Fails to consider the risks of severe accidents and terrorist attacks.

OGD asserts that Applicant's License Application fails to adequately analyze transportation accident conditions in that "it fails to consider the risks of severe accidents and terrorist attacks which could result in significant radiological releases." OGD Petition at 7, 12. The safety aspects of off-site transportation of spent fuel, including measures to address spent fuel transportation accidents including sabotage, are controlled by 10 C.F.R. Parts 71 and 73, and by DOT regulations, not by 10 C.F.R. Part 72. See, e.g., 10 C.F.R. §§ 71.5, 73.37. So to the extent that OGD seeks to include off-site spent fuel transportation accidents in Applicant's ISFSI Emergency Plan, this contention must be dismissed as being beyond the scope of this proceeding. See Section II.B supra at 8.

Environmental impact statements need not discuss, moreover, the environmental effects of alternatives which are "deemed only remote and speculative possibilities." Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, 435 U.S. 519, 551 (1978); Philadelphia Electric Co. (Limerick Generating Station, Units 1 & 2), ALAB-819, 22 NRC 681, 696-97, n.12, 700 (1985). Additionally, the environmental report for a facility need not include the environmental effects from the risk of sabotage. Limerick, ALAB-819, 22 NRC at 701. The risk of sabotage is not yet amenable to the degree of quantification that could be meaningfully used in the environmental impact decisionmaking process. Id.. So to the extent that OGD seeks to include off-site spent fuel transportation accidents, including sabotage, beyond what is accounted for in Table S-4, this contention must be dismissed as being beyond the scope of this proceeding.

The design basis threat of radiological sabotage for a nuclear facility and for materials in transit is defined in 10 C.F.R. § 73.1(a)(1). See Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-653, printed as an Attachment to CLI-82-19, 16 NRC 53, 59 (1981). The specific provisions of the design basis in 10 C.F.R. § 73.1(a)(1) are applicable to a particular type of nuclear facility (an ISFSI, for example) only to the extent that they are referenced in sections of 10 C.F.R. 73 that are applicable to that particular type of nuclear facility or to materials in transit. See Georgia Tech, LBP-95-6, 41 NRC at 292. The design basis threat for a nuclear facility is generic rather than site-specific. See Diablo Canyon, ALAB-653, 16 NRC at 74. There is no need for Applicant or the NRC staff to perform site-specific analyses of potential threats that are specific to Applicant's proposed facility. Id. Nor is it necessary for Applicant or NRC staff to understand, characterize, and analyze the attributes of the attackers in light of the site-specific conditions at the proposed facility, because the characteristics and attributes of the generic design basis adversary are set forth in the regulations. Id. at 75. The types of weapons used by the design basis attackers are also established in the regulations. Id. OGD asserts that Applicant should consider terrorist attack "using a high energy explosive device or an anti-tank weapon." OGD Petition at 12. Contrary to OGD's assertion, a petitioner can not require the proposed facility to take into account various weapons that are not included in the regulations, such as "fixed-wing aircraft, helicopters, mortars, rocket launchers, grenade launchers, and anti-tank weapons." See Diablo Canyon, ALAB-653, 16 NRC at 75. OGD's contention is invalid in that OGD inappropriately "advocates stricter requirements than those imposed by the

regulations," and moreover, this contention is a direct challenge to NRC regulation in its definition of design basis threats in 10 C.F.R. § 73.1(a) (see 10 C.F.R. § 2.758(a)). Hence, this contention must be dismissed.

(iii) Fails to consider human errors or insider sabotage.

OGD asserts that Applicant's License Application fails to adequately analyze transportation accident conditions in that it "fails to consider . . . the ways in which human errors . . . could cause or exacerbate transportation accidents." OGD Petition at 7.[96]

Contrary to OGD's assertion, Applicant does address human error in evaluating the environmental impacts of transporting spent fuel to the PFS, in utilizing Table S-4 in 10 C.F.R. § 51.52 and WASH-1238. See ER at 4.7-1 through 4.7-9 (incident-free transportation); ER at 5.2-1 through 5.2-3 (postulated transportation accidents); see also Calculation Package Vol. II, Tab 21, "PFSF Transportation Impacts," SWEC Calc. No. 05996.01-P-001 at 4. WASH-1238 and Table S-4 adequately evaluate the probability and consequences of a shipping accident, including those that might be caused by error in preparing a cask for shipment. Virginia Electric and Power Co., (North Anna Power Station, Units 1 & 20, LBP-85-34, 22 NRC 481, 488 (1986). WASH-1238, which is the basis for Table S-4, states that:

> [i]t is possible that a package will be constructed or used in a manner not in accordance with the design; however, the

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[96] Applicant provides further response to its evaluation of the impact of human error as a cause or contribution to accident events at the PFS site at its response to OGD Contention A. See Applicant's Response to OGD Contention A.

> likelihood of such error is considered small in view of the regulatory requirements for quality assurance and for various observations and tests before each shipment.

WASH-1238 at 16, 72. Yet again, OGD asserts a contention that mistakenly claims that Applicant failed to address a relevant issue in the application. Therefore, this contention must be dismissed.

OGD asserts that Applicant's License Application fails to adequately analyze transportation accident conditions in that it "fails to consider . . . the ways in which . . . insider sabotage could cause or exacerbate transportation accidents." OGD Petition at 7.[97] The design basis threat of radiological sabotage for a nuclear facility and to materials in transit is defined in 10 C.F.R. § 73.1(a)(1). See Diablo Canyon, ALAB-653, 16 NRC at 59. Insider sabotage is an integral part of the Commission's design basis threat for radiological sabotage. See 10 C.F.R. § 73.1(a)(1). Specifically, the design basis threat includes:

> inside assistance which may include a knowledgeable individual who attempts to participate in a passive role (e.g., provide information), an active role (e.g., facilitate entrance and exit, disable alarms and communications, participate in violent attack), or both.
>
> . . .
>
> [a]n internal threat of an insider, including an employee (in any position) ...

[97] Applicant provides further response to its addressing insider sabotage as a cause of or contribution to accident events at the PFS site at its response to OGD Contention A. See Applicant's Response to OGD Contention A.

Id. (emphasis added). The physical security measures required for a fixed facility under 10 C.F.R. Part 73 do not extend beyond the facility's boundaries. See Commonwealth Edison Co. (Braidwood Nuclear Power Station, Units 1 and 2), LBP-85-27, 22 NRC 126, 138 (1985). The Commission regulates off-site transportation of spent fuel under 10 C.F.R. Part 71, not 10 C.F.R. Part 72. 10 C.F.R. Part 71, in turn, requires spent fuel transportation to be done in compliance with the transportation safeguards requirements in 10 C.F.R. Part 73. See 10 C.F.R. § 71.0(b). Part 73 explicitly includes other measures in transportation-specific regulations to protect off-site shipments of spent fuel to or from a fixed facility. Id.; see, e.g., 10 C.F.R. §§ 73.25, 73.26, 73.27, and 73.37. So to the extent that OGD seeks to include transportation safeguards measures in a 10 C.F.R. Part 72 materials licensing proceeding, this contention must be dismissed as being beyond the scope of this proceeding.

Additionally, this contention does not provide any facts or technical analyses to support this claim. A contention that simply alleges that some matter ought to be considered" does not provide a sufficient basis for an admissible contention. See Section II.C.1 supra at 13. A petitioner is obligated "to provide the [technical] analyses and expert opinion" or other information "showing why its bases support its contention." OGD here has failed to do so and thus this contention must be dismissed.

(iv) Ignores DOE accident rate analysis and DOE and Nevada accident consequence analyses.

OGD asserts that Applicant's License Application fails to adequately analyze transportation accident conditions in that it "ignores the accident rate analysis prepared by

DOE" and "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." See OGD Petition at 10, 11. However, even if the DOE accident rate and accident consequence analysis cited by OGD are accepted, they have no bearing on the information included in Applicant's Environmental Report. The accident rate cited by OGD is irrelevant, as explicitly stated in OGD's Exhibit 6, on which it relies for this contention (OGD Petition at 10-11):

> in no case has there been injury, death, or environmental damages as a result of the radioactive nature of the cargo.
>
> . . .
>
> [d]uring the domestic history of SNF [spent nuclear fuel] transportation, there have been no accidents or incidents where damages to the vehicle or cask resulted in the release of radioactive materials or injury to the public.

OGD Petition Ex. 6 at 1, 8. Therefore, since the accidents have had no radiological consequences, the accuracy of OGD's numbers is of no concern. In any case, OGD has not alleged, let alone shown any basis, that the transportation impacts described in the Environmental Report are inconsistent with DOE's accident numbers.

OGD itself states that:

> the probability of an accident severe enough to cause even a small risk of radioactivity is extremely low (the previously cited study [at OGD Petition Ex. 7 at 3-2] estimated the probability of the very severe rail accident at no more than two accidents per million shipments) ....

OGD Petition at 11. Such low probability events are the types of remote and speculative impacts that NEPA does not require to be considered. San Luis Obispo Mothers for Peace v. NRC, 751 F.2d 1287, 1300 (D.C. Cir. 1984), rehearing en banc granted on other grounds, 760 F.2d 1320 (D.C. Cir. 1985), aff'd on hearing en banc, 789 F.2d 26 (D.C. Cir.), cert. denied, 479 U.S. 923 (1986). This contention must be dismissed as beyond the reach of NEPA.

(v) Is silent regarding number of accidents expected to occur during shipments to PFS

OGD alleges that the License Application "is silent regarding the number of accidents that would be expected to occur during shipments to PFS." OGD Petition at 10. OGD further provides a calculation of the expected number of accidents utilizing data from a DOE report. Id.

The regulation requiring Applicant to evaluate spent fuel transportation does not require Applicant to specify "the number of accidents that would be expected to occur during shipments to PFS." Id. The regulation states that:

> The proposed ISFSI or MRS must be evaluated with respect to the potential impact on the environment of the transportation of spent fuel or high-level radioactive waste within the region.

10 C.F.R. § 72.108. OGD's contention is invalid in that OGD inappropriately "advocates stricter requirements than those imposed by the regulations." Seabrook, LBP-82-106, 15. Hence, this contention must be dismissed.

The contention should also be rejected in that it seeks to raise an issue (i.e., the number of accidents) that is outside the scope of NEPA. The number of accidents is

irrelevant if those accidents cause no environmental impact. As noted above, OGD's own exhibit relied upon as the basis for this contention (see OGD Petition at 10) states that none of the accidents caused any environmental damages of a radiological nature. OGD Petition Ex. 3 at 2. Hence, this contention must be dismissed because it does not allege that the application is deficient.

g) Failure to consider the traumatic collective impact of transportation risks.

OGD alleges that the License Application "fails to consider . . . the traumatic collective impact of transportation risks on members of OGD who seek to preserve their traditional life style." OGD Petition at 7. OGD claims that "[e]ven if the contamination resulting from a very severe transportation accident could be completely cleaned up, the cleanup process itself would have severe impacts on the OGD community and traditional life style, and their attitudes toward 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." Id. at 12.

However, as discussed further in response to OGD Contention P, subpart c, psychological effects are outside the zone of interest protected by NEPA and the Atomic Energy Act. Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit No. 1), CLI-82-6, 15 NRC 407, 408 (1982) (AEA); Metropolitan Edison Co. v. People Against Nuclear Energy, 460 U.S. 766, 772 (1983) (NEPA). To be cognizable under NEPA, there must be "a reasonably close causal relationship between a change in the physical environment and the effect at issue." Metropolitan Edison, 460 U.S. at 774 (emphasis

added). Fear and its effects on the mental or physical well-being of individuals do not give rise to litigable contentions and thus this contention must be dismissed.

D. OGD Contention D: License Application Lacks Procedures for Returning Damaged Casks to the Generating Reactor.

1. The Contention

OGD alleges in Contention D that:

> 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.

OGD Petition at 16. The asserted basis for the contention simply states, without further explanation or support, that the "license application does not provide for procedures for returning casks to the generating reactor should there be a[n] 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." Id.[98] In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations made in its basis:

> The license application, which indicates that the casks will be inspected for damage prior to "accepting" the cask and

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[98] The basis also states that the OGD incorporates the discussions regarding "possible accidents and the mitigation measures" in its contentions A and C. Id. The Applicant's responses to the "possible accidents and the mitigation measures" discussed in OGD's contentions A and C are fully addressed in its responses to those contentions.

before it enters the Restricted Area (SAR p. 5.1-4}, poses undue risk to public health and safety in that

a) 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.

b) 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 casks back to the generating reactor.

2. Applicant's Response to the Contention

a) Procedures for Returning Damaged Casks

OGD claims that the License Application is deficient because it does not provide procedures for returning damaged shipping casks to the generating reactor.[99]

This subcontention must be dismissed on various grounds. First, the Applicant's Emergency Plan is not required to include implementing procedures: "the Commission never intended the implementing procedures to be required for the 'reasonable assurance' finding and thus to be prepared and subject to scrutiny during the hearing. . . . [T]he Commission did not want licensing hearings to become bogged down with such details." Louisiana Power and Light Company (Waterford Steam Electric Station, Unit 3), ALAB-732, 17 NRC 1076, 1107 (1983); Curators of the University of Missouri, CLI-95-8, 41 NRC 386, 398 (1995). As stated by the licensing board in Carolina Power & Light

[99] The contention's focus on shipping casks is clear from its reference to SAR p. 5.1-4, which addresses receipt and inspection of incoming shipping casks and spent fuel canisters.

Company (Shearon Harris Nuclear Power Plant, Units 1 and 2), LBP-84-29B, 20 NRC 389, 408 (1984):

> Implementability is the characteristic of good *plans* . . . . Thus it is to the adequacy of planning that all the Commission's planning standards and evaluation criteria are directed . . . . The mechanical details implementing procedures largely consist of are almost never suitable for litigation.

Thus, assuming arguendo that shipping casks will become damaged and that a licensee application for an ISFSI must address their return to reactor sites under the requirement that the emergency plan include a description of the means to mitigate the consequences of accidents and restore the facility after an accident, the Applicant need not include procedures for returning damaged shipping casks to reactor sites. Therefore this subcontention must be dismissed as "an impermissible collateral attack on the Commission's rules" for "advocat[ing] stricter requirements than those imposed by the regulations." See Section II.B supra.

Second, this subcontention must be dismissed because the issue it raises is outside the scope of this hearing. See supra Section II. The Applicant's Emergency Plan is required to address accidents at the ISFSI, not offsite transportation accidents that might damage a spent fuel cask. Because of the low risk posed to the public by ISFSI's, such as the Applicant's, that do not repackage or handle spent fuel, their emergency plans are required to address onsite emergencies only. See Northern States Power Company (Independent Fuel Storage Installation) Director's Decision under 10 C.F.R. § 2.206 (DD-97-24), 62 Fed. Reg. 51,916, 51,917 (1997); see also supra Applicant's response to

OGD Contention B. The safety aspects of offsite transportation of spent fuel, including measures to address spent fuel transportation accidents, are controlled by 10 C.F.R. Parts 71 and 73, and by DOT regulations, not by 10 C.F.R. Part 72. See, e.g., 10 C.F.R. §§ 71.5, 73.37. So to the extent that OGD seeks to include offsite transportation accidents in the Applicant's ISFSI Emergency Plan, this contention must be dismissed as being beyond the scope of this proceeding.

Third, this subcontention must be dismissed because it ignores relevant material submitted by the Applicant. Contrary to OGD's assertion (OGD Petition at 16), the Applicant's SAR makes no mention of returning degraded or contaminated shipping casks to the reactors from which the ISFSI will receive spent fuel. The SAR specifically provides that:

> If shipping cask repair or maintenance activities are necessary, they will be conducted at the Operation and Maintenance Building or at a vendor designated location.

SAR at 4.5-3. Moreover, the casks are designed to withstand being dropped, so it is unlikely that they would suffer significant damage due to mishandling at the ISFSI. Id. Furthermore, the Applicant provides a means for removing surface contamination from a shipping cask even though the contamination of a cask is not a likely event. Under off-normal conditions in which contamination of equipment or structures is encountered, contamination would be removed by use of dry decontamination methods (e.g., paper wipes or rags). SAR at 4.4-1. There is no need for more extensive decontamination measures because the spent fuel inside the casks is sealed within welded canisters. Id. at

4.5-3. Here, OGD has ignored the provisions in the Applicant's SAR that provide for repair of a damaged or degraded shipping cask and provide a means for removing surface contamination from a shipping cask. See OGD Petition at 15-16. Thus this subcontention must be dismissed.

Finally, this subcontention must be dismissed for failing to show that a genuine dispute exists regarding a material issue of law or fact. See Section II.C.2 supra. OGD identifies no facts, expert opinion, analyses or documents to support its implied allegation that a shipping cask could become damaged or contaminated such that the measures for repair and decontamination provided for in the application would be insufficient. See OGD Petition at 16. Furthermore, the Applicant's handling of transportation of casks to be repaired or maintained offsite would be governed by the provisions of 10 C.F.R. Part 71, Subpart G. See 10 C.F.R. §§ 71.81-71.100. Finally, to gain the admission of a contention founded on the premise that the Applicant will not follow regulatory requirements, petitioner must make some particularized demonstration that there is a reasonable basis to believe the Applicant would act contrary to their explicit terms. General Public Utilities Nuclear Corporation (Oyster Creek Nuclear Generating Station), LBP-96-23, 44 NRC 143, 164 (1996). OGD makes no such showing. See OGD Petition at 15-16. Therefore, OGD has not shown that a material dispute exists with the Applicant and thus this subcontention must be dismissed.

b) Housing of Damaged or Contaminated Casks

In this subcontention, OGD claims that "there is no provision for housing the casks prior to shipping the cask back to the generating reactor" if the "casks are damaged or do not meet the criteria specified in LA AP. A, p. TS-19." OGD Petition at 16. This subcontention must be dismissed for various reasons, including the fact that it is based on a misinterpretation of the cited License Application provision.

First, like Subcontention (a), this subcontention must be dismissed because the Applicant is not required to include implementing procedures with its application. See supra Subcontention (a).

Second, this subcontention ignores relevant material submitted by the Applicant. The particular License Application provision cited by OGD is addressing a canister - - not a shipping cask - - that exceeds the specification limits for external surface contamination. The License Application provision cited by OGD contains the following:

> 3/4.1 Canister External Surface Contamination
>
> The removable surface contamination on the outer surface of the canister shall be less than 22,000 dpm/100 sq cm from beta and gamma and less than 2,200 dpm/100 sq cm from alpha emitting sources.
>
> . . . .
>
> If the above specified limits are exceeded, return the canister and shipping cask to the originating nuclear power plant for decontamination.

LA App. A at TS-19, cited in OGD Petition at 16 (emphasis added). The SAR similarly provides for the return of the canister in such circumstances:

> [o]nce the shipping cask arrives at the PFSF and its closure is removed, a smear survey of accessible portions of the canister is again performed.[100] If removable surface contamination levels on the top of the canister exceed the limits specified in Section 10.2.2.1 (22,000 dpm/100 cm^2 beta/gamma and 2,200 dpm/100 cm^2 alpha), the canister is returned to the originating nuclear power plant for decontamination.

SAR at 7.2-11 (emphasis added). If a canister exceeds the limits in the specification, then the canister will be returned in its shipping cask to the originating nuclear power plant for decontamination; the canister will not be decontaminated at the PFSF. See SAR at 6.4-1. Thus, the provision cited concerns canister contamination and not the shipping cask and the subcontention must be dismissed "because [it does] not accurately address the Applicant['s] proposal." Carolina Power & Light Company (Shearon Harris Nuclear Power Plant, Units 1 and 2), LBP-82-119A, 16 NRC 2069, 2082 (1982).

Moreover, the SAR does expressly provide one measure for housing a shipping cask while it is being repaired or maintained (see supra Subcontention (a)): "[i]f shipping cask repair or maintenance activities are necessary, they will be conducted at the Operation and Maintenance Building." SAR at 4.5-3. OGD has ignored this point. See OGD Petition at 15-16. In addition, OGD has provided absolutely no basis in fact, expert opinion, or documentation, to support its challenge of the adequacy of the Applicant's repair, maintenance or temporary housing measures. See id. For failing to provide a specific factual basis that shows that a specific part of the application is in error or that

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100 Health physics smear surveys are performed at the originating nuclear power plant on the accessible surfaces of the canister and the interior of the transfer cask to assess removable contamination levels prior to release of the shipment. See SAR at 6.1-1.

the Applicant has omitted some specific relevant piece of information, OGD has failed to show that a genuine dispute exists with the Applicant on a material issue of fact or law and thus this subcontention must be dismissed.

E. OGD Contention 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.

1. The Contention:

OGD alleges in Contention E that:

> 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."

OGD Petition at 17. The asserted bases for the contention are set forth in two pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows, incorporating the specific allegations in its bases:

> 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." Specifically:

a) The Application does not provide for procedures for returning defective casks as required by 10 C.F.R. § 72.32.

b) The Application provides no assurance of the existence of alternative sites if casks become defective while in storage at PFS.

- Some of the participating plants may be decommissioned rapidly and be unavailable for the return of their spent fuel if the canisters and/or casks become defective while in storage at PFSF.

- Application does not address uncertainties about availability of Yucca Mountain. Moreover, earliest availability would be 2010.

2. Applicant's Response to the Contention

OGD raises a number of issues under Contention E, which we address in turn below.

a) Procedures for Returning Defective Casks

OGD asserts that the proposed ISFSI poses an undue threat to the public health and safety in that the Applicant fails to provide information regarding and a plan to deal with casks that may leak or become contaminated during the lifetime of the facility. OGD Petition at 17. Specifically, OGD claims that the Applicant fails to provide procedures for returning the casks to the generating reactor or dealing with the casks in the event of an accident at the proposed ISFSI or a contaminated canister should the generating reactor have been decommissioned as provided for in 10 C.F.R. § 72.32,

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which requires a description of the means of restoring the facility to a safe condition after an accident. Id.

First, this subcontention must be dismissed because it provides no underlying factual basis for the contention. OGD simply alleges that accidents will cause casks to become defective or contaminated, and thus necessary to remove from the ISFSI, without providing any "alleged facts or expert opinion, [nor related references,] which support" its allegation as required by 10 C.F.R. § 2.714(b)(2)(ii). Similarly, OGD asserts that casks "may leak or become contaminated" during the license term of the ISFSI without providing any factual basis, expert opinion, or supporting sources for this assertion. See OGD Petition at 17-18. Moreover, OGD provides no basis for the assertion (assuming *arguendo* that casks did become damaged or contaminated) that those casks would have to be removed from the ISFSI prior to the availability of a disposal site. See id. It merely states, without support, that "PFS does not have the facilities to repackage contaminated canisters," and that "the casks may be too contaminated to transport." Id. at 17. In addition, this subcontention should be dismissed because OGD is required to set forth a technical basis in references or expert opinion in order to support a claim that an accident scenario will cause an accidental release of radioactive materials. OGD did not do so. See OGD Petition at 17-18. Thus the subcontention must be dismissed.

Second, this subcontention must be dismissed because it seeks to litigate a generic determination made by the NRC. See Section II.B supra. OGD asserts that casks "may leak or become contaminated" through an accident at the ISFSI. OGD Petition at 17. The NRC, however, has generically determined that such an accident scenario is not

credible. See 60 Fed. Reg. 32,430, 32,438 (1995) (Part 72, Statements of Consideration). In the context of promulgating emergency planning rules for ISFSIs, the NRC stated that it "was not able to identify any design basis accident that would result in the failure of a confinement boundary." Id. It addressed a hypothetical loss of confinement boundary (i.e. breach of both the canister and the cask) accident only "to provide a conservative bounding analysis of the threat to public health and safety." Id. Therefore, because it is premised on a scenario that the NRC has generically determined to be non-credible, this subcontention must be dismissed.

Third, this subcontention must be dismissed because it is another case where OGD mistakenly claims that the applicant failed to address a relevant issue in the application. Contrary to OGD's assertion that the Applicant "fails to provide information and a plan to deal with casks that may leak or become contaminated" (OGD Petition at 17), the Applicant has established a three-tiered method for accident recovery and retrieval capability (i.e., to deal with the casks and canisters) following a hypothetical (but non-credible) loss of confinement barrier accident. The primary method for recovery would be to return the breached canister to the spent fuel pool where it was originally loaded. See SAR at 8.2-40 to 41.[101] This approach was cited with approval in Northern States Power Company (Prairie Island Nuclear Generating Plant, Units 1 and 2), DD-96-21, 44 NRC 297, 309 (1996), which rejected a 2.206 Petition which claimed that plans for unloading spent fuel from storage casks in emergency conditions did not satisfy NRC

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[101] The canister would be loaded into a shipping cask which would provide the confinement boundary during transportation back to the reactor. SAR at 8.2-40.

requirements. The second method would be to enclose the breached canister inside another canister or a certified transportation cask at the ISFSI site. See SAR at 8.2-41 to 42. This is fully consistent with a second approach, temporary storage in another storage cask or a certified transportation cask, also cited in Prairie Island, DD-96-21, 44 NRC at 309. The third method would be to utilize a portable dry transfer system at the ISFSI to transfer spent fuel from a breached canister into a new canister or a transportation cask. See SAR at 8.2-42 to 43. This is analogous to that proposed for the Yankee Rowe nuclear power plant and discussed in Yankee Atomic Electric Company (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61, 79-80. Therefore, contrary to OGD's assertion (OGD Petition at 16), the Applicant has provided information regarding and a plan to deal with casks that may leak or become contaminated; thus, this subcontention must be dismissed.

Finally, this subcontention must be dismissed as "an impermissible collateral attack on the Commission's rules" for "advocat[ing] stricter requirements than those imposed by the regulations." OGD alleges that the Applicant must provide procedures for returning the casks to the generating reactor or dealing with the casks should the generating reactor have been decommissioned. OGD Petition at 17 (citing 10 C.F.R. § 72.32). 10 C.F.R. § 72.32 does not require that the Applicant submit accident recovery procedures but only that the Applicant provide "[a] brief description of the means of restoring the facility to a safe condition after an accident." 10 C.F.R. § 72.32(a)(11).

Further, Commission precedent establishes that the means of accident recovery need not be finalized as part of the emergency plan, as long as it is sufficiently developed

to support the necessary finding of "reasonable assurance" that the means could be implemented. See Philadelphia Electric Company (Limerick Generating Station, Units 1 and 2), ALAB-819, 22 NRC 681, 710 (1985), citing Louisiana Power and Light Company (Waterford Steam Electric Station, Unit 3), ALAB-732, 17 NRC 1076, 1103-04 (1984). Because it must anticipate unintended "off-normal" and "accident" events, the Commission relies on predictive findings of adequacy in the emergency planning area more so than in other areas of facility licensing. Limerick, ALAB-819, 22 NRC at 710. Therefore, the Applicant need not include accident recovery procedures in its license application and this subcontention must be dismissed as an impermissible collateral attack on NRC regulations.

b) Alternative Sites for the Return of Defective Casks

OGD asserts that the application provides no assurance that there will be an alternative site to which canisters and/or casks can be shipped if they become defective while in storage at the ISFSI. OGD Petition at 17.

At the outset, like Subcontention (a), supra, this subcontention must be dismissed because it is premised on the assumption that accidents will cause casks to become defective or contaminated, and thus necessary to remove from the ISFSI, without providing any "alleged facts or expert opinion which support" its assumption and without providing "references to . . . specific sources and documents . . . on which the petitioner intends to rely to establish [said] facts or expert opinion." 10 C.F.R. § 2.714(b)(2)(ii); see OGD Petition at 17-18.

Moreover, also like Subcontention (a), this subcontention must be dismissed because it seeks to litigate a generic determination made by the NRC. See Section II. B. OGD asserts that casks "may leak or become contaminated" through an accident at the ISFSI, OGD Petition at 17, yet the NRC has generically determined that such an accident scenario is not credible. See 60 Fed. Reg. at 32,438; see supra Subcontention (a). Therefore, this subcontention must be dismissed.

(i) Potential Decommissioning of Reactors

OGD claims that there may be no alternative sites for shipping contaminated canisters or casks because some of the reactors that may ship fuel to the ISFSI will be decommissioned shortly after their fuel is gone. OGD Petition at 17 (quoting ER at 8.1-3).

This subcontention must be dismissed because OGD has not provided "[s]ufficient information . . . to show that a genuine dispute exists with the applicant on a material issue of law or fact." 10 C.F.R. § 2.714(b)(2)(iii). OGD claims that the fact that some of the reactors that ship fuel to the ISFSI may be decommissioned shortly thereafter is relevant because the Applicant may have to ship canisters and/or casks that become contaminated back to the reactor sites from which they came. OGD Petition at 17. On the contrary, however, the application shows that while the Applicant may return canisters it discovers to be contaminated immediately upon their arrival at the ISFSI, SAR at 7.2-11, the Applicant has other means, as discussed in subpart (a) above, of dealing with casks or canisters that become damaged or contaminated while in storage

and thus it need not return them. SAR at 8.2-40 to 43. Therefore, the fact that reactors may be decommissioned shortly after shipping their fuel to the ISFSI is not a material issue. A contention must be dismissed where the "contention, if proven, would be of no consequence . . . because it would not entitle the petitioner to relief." See Section II.A. supra. Because this contention would be of no consequence if proven, it must be dismissed.

(ii) Potential Unavailability of DOE Repository

OGD asserts that the Applicant does not adequately address the uncertainties regarding the availability of the Yucca Mountain site as a DOE repository for spent fuel and that in any event the repository would not be available until 2010. OGD Petition at 18.

Like Subcontention (b)(1), this subcontention must be dismissed because OGD has not provided "[s]ufficient information . . . to show that a genuine dispute exists with the applicant on a material issue of law or fact." 10 C.F.R. § 2.714(b)(2)(iii). The availability of a Federal repository for spent fuel is not relevant to accident recovery and therefore this is not a material issue of law or fact. See id. Because the Applicant has other means of dealing with damaged or contaminated casks or canisters, it need not move them offsite at all until the ISFSI is decommissioned. SAR at 8.2-40 to 43. Therefore, the fact that a Federal repository might not be available during some portion of the ISFSI's lifetime is not a material issue. A contention must be dismissed where the "contention, if proven, would be of no consequence . . . because it would not entitle the

petitioner to relief." 10 C.F.R. § 2.714(d)(2)(ii). Because this contention would be of no consequence if proven, it must be dismissed.

Moreover, this subcontention must be dismissed because it seeks to litigate a generic determination made by the NRC. See Section II.B. supra. The NRC has determined that

> there is reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century, and sufficient repository capacity will be available within 30 years beyond the licensed life for operation of any reactor to dispose of the . . . spent fuel originating in such reactor and generated up to that time.

10 C.F.R. § 51.23(a) (emphasis added). Therefore, the Applicant may indeed rely on the availability of a Federal spent fuel repository as a site to which damaged canisters could ultimately be shipped. Because it attacks the NRC's generic determination, this subcontention is "barred as a matter of law."

F. OGD Contention F: The License Application Fails to Make Clear Provisions for Funding of Estimated Construction Costs, Operating Costs, and Decommissioning Costs

1. The Contention

OGD alleges in Contention F that:

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

OGD Petition at 18. The basis for the contention provides in its entirety that:

> 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).

Id. at 18-19. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its bases:

> The license application poses undue risk to public health and safety in that the license application fails to
>
> a) make clear provisions for the funding of estimated construction costs, operating costs, and decommissioning costs.
>
> b) make clear as part of the construction who the contractors will be; and
>
> c) 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).

2. Applicant's Response to the Contention

The contention and bases quoted above are the sum total of OGD's filing with respect to its Contention F. As such, the contention is fatally flawed and must be rejected for failing to meet the rudimentary pleading requirements set forth in 10 C.F.R. § 2.714(b). OGD has failed to supply a "concise statement of the alleged facts or expert opinion" supporting the contention together with references to "specific sources and documents . . . on which [it] intends to rely to establish those facts or expert opinion," as

required by 10 C.F.R. § 2.714(b)(2)(ii). Nor has OGD set forth "the specific portions of the application . . . that [OGD] disputes and the supporting reasons for each dispute" as required by 10 C.F.R. § 2.714(b)(2)(iii).

In short, OGD has not met its initial burden to come forward with reasonably precise claims rooted in fact, documents or expert opinion in order to proceed past the initial stage and toward a hearing. Therefore, as discussed further below, OGD Contention F must be dismissed.

a) Funding Provisions

OGD contends that the License Application "fails to make clear provisions for funding of estimated construction costs, operating costs and decommissioning costs." OGD Petition at 18. This subcontention must be dismissed for lack of specificity and basis. OGD fails to specify the type of "clear provisions" that it contends are required for funding estimated construction costs, operating costs and decommission costs. The License Application sets forth the funding mechanism to be used for construction, operations and decommissioning. See LA at 1-4 to 1-8. OGD sets forth not a single specific objection to the mechanisms, or indeed even a recognition that they have been specified in the License Application. Thus, this subcontention must be dismissed for not containing "a specific statement of the issue of law or fact to be raised or controverted." 10 C.F.R. § 2.714(b)(2).

Additionally, this subcontention is completely devoid of any basis as generally discussed above and must be rejected for that reason as well. Moreover, it must be

dismissed because it does not provide any basis to show that the alleged lack of clear funding provisions will result in a lack of reasonable assurance of PFS obtaining the necessary funds to cover the construction and operation of the PFSF. In the context of decommissioning, the Commission has held that a petitioner challenging the adequacy of decommissioning funding or the decommissioning plan must do more than assert deficiencies in the plan or its estimates. Rather, "some specific, tangible link between the alleged errors in the plan and the health and safety impacts they invoke must be shown." Yankee Atomic, supra, CLI-96-7, 43 NRC at 258. Accord Yankee Atomic Electric Company, (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1, 9 (1996) (a petitioner "will need to show not only that the estimate is in error but that there is not reasonable assurance that the amount will be paid."). The same rationale would apply equally to challenges to the reasonable assurance of obtaining funds for construction and operation. A petitioner must show that its contentions have some health and safety significance, which OGD has not done here. The subcontention must therefore be rejected.

b) Failure to Identify Contractors

In this subcontention OGD alleges that the Application fails to make clear who the construction contractors will be. By doing so it "advocate[s] stricter requirements than imposed by the regulations" and therefore is "an impermissible collateral attack on the Commission's rules" which must be rejected. Nowhere do the financial qualification regulations, or any other applicable regulations, expressly or implicitly require an applicant to identify the names of the contractors that will be constructing a facility. Additionally, this subcontention is completely devoid of any basis as discussed generally

above. Moreover, as in subpart a), this subcontention provides no basis whatsoever to show that the alleged lack of identification of contractors will result in a lack of reasonable assurances of PFS obtaining the necessary funds for the construction, operation and decommissioning of the PFSF as required by the two Commission decisions in Yankee Atomic, supra.

Thus, this subcontention must be dismissed.

c) Lack of Reasonable Assurance

OGD contends that Applicant does not demonstrate that PFS has reasonable assurance of obtaining the necessary funds as required by 10 C.F.R. § 72.22(e). This contention must be dismissed for lack of basis. As set forth at the outset of this response, this contention is totally devoid of any supporting facts, expert opinion or documents as required by the Commission Rules of Practice. Such unsupported allegations are insufficient to admit a contention for litigation. Therefore this subcontention, and the contention in its entirety, must be dismissed.

G. OGD Contention G: The License Application Fails to Provide for Adequate Radiation Monitoring

1. The Contention

OGD alleges in Contention G that:

> 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.

OGD Petition at 19. The asserted basis for the contention is set forth in a two-sentence paragraph, on the same page as a petition from OGD. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated incorporating the specific allegations in its bases as indicated below:

> 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 in that it
>
> a) fails to provide for adequate radiation monitoring necessary to facilitate radiation detection, event classification, emergency planning and notification, and
>
> b) fails to meet requirements of 10 C.F.R. § 72.32(a)(6) because it does not describe the methods and equipment to assess releases of radioactive material outside of the ISFSI site.

In addition to the contention, OGD also petitions the Commission to require PFS to implement a series of eight measures to monitor radiation exposure from PFSF activities in the event the Commission grants a license to PFS. OGD Petition at 19-20. OGD's petition must be dismissed as a premature request for the Commission to impose license conditions. It is based on the presumption that it will prevail on its contention which, assuming the contention were admitted, would only be determined after hearing. OGD does not represent the measures of its petition to be considered as a contention for litigation in this proceeding. Nor could it, since it plainly does not meet the pleading requirements of 10 C.F.R. § 2.714(b) in that, among failing to meet other requirements, it is totally devoid of any supporting basis.

2. Applicant's Response to the Contention

OGD raises two issues under its Contention G. First, it asserts that the License Application fails generally to provide for adequate radiation monitoring. Second, it asserts that the License Application fails to meet requirements of 10 C.F.R. § 72.32(a)(6) because it does not describe the methods and equipment to assess releases of radioactive material outside of the ISFSI site. We address each in turn below.

a) License Application Fails to Provide Adequate Radiation Monitoring.

OGD contends that the Applicant's license application is deficient because it fails to provide adequate radiation monitoring necessary to facilitate radiation detection, event classification, emergency planning, and notification. See OGD Petition at 19. OGD's assertion that the license application is deficient because it fails to provide adequate radiation monitoring must be rejected for failure to meet the Commission's regulations on basis and specificity for contentions. See 10 C.F.R. § 2.714(b). OGD alleges that the license application fails to facilitate "radiation detection, event classification, emergency planning and notification." OGD Petition at 19. But, contrary to the Commission's regulations, OGD's contention is neither supported by any specific "bases," "alleged facts," or "expert opinions," nor is it supported by a "showing [of] references to the specific portions of the application . . . that the petitioner disputes," both required for an admissible contention. See 10 C.F.R. § 2.714(b). In fact, the bases for the entire contention is only two sentences which comprise the subcontention discussed under subpart (b) infra. Such unsubstantiated claims must fall in the face of the Commission's

amended pleading requirements. OGD's Contention G fails on all accounts and must be dismissed.

Furthermore, OGD's Contention G must be dismissed because it ignores the fact that the License Application does discuss the "radiation monitoring necessary to facilitate radiation detection, event classification, emergency planning and notification." See OGD Petition at 19. A contention that mistakenly claims that the applicant did not address a relevant issue in the license application must be dismissed. In setting forth a contention pursuant to 10 C.F.R. § 2.714(b), a petitioner is required to "read the pertinent portions of the license application, including the Safety Analysis Report and the Environmental Report, state the applicant's position and the petitioner's opposing view." See 54 Fed. Reg. 33,168, 33,170 (1989). [discussing revised, higher threshold for admissibility of contentions]. OGD has failed to do so here.

Radiation monitoring for "radiation detection, event classification, emergency planning, and notification" is addressed in numerous locations throughout the Applicant's license application. Radiation monitoring for "radiation detection" is explicitly addressed in Section 3.1, "Accident Detection" in the Emergency Plan ("EP"), which states

> Radiation Protection personnel monitor canister transfer operations and would identify significant levels of contamination that could result from off-normal operations. In the event of a dropped or mishandled canister, Radiation Protection personnel would perform surveys of the area, including radiation, airborne, and surface contamination surveys, which would detect the radiological effects of a breached canister.
>
> Fixed radiation monitors with audible alarms in the Canister Transfer Building will provide warning to

> personnel involved in canister transfer operations if abnormal radiation levels occur during transfer operations.

EP at 3-1 to 3-2. Radiation monitoring for event classification and notification is also addressed in the Emergency Plan, where it states that in the event that there are elevated radiation or airborne contamination levels in the Canister Transfer Building, the

> Elevated radiation levels would activate area radiation monitor alarms, warning site personnel to evacuate the area. Elevated contamination levels would be announced to the site personnel in the area by the radiation protection technician measuring the sample, evacuating personnel from the area as appropriate. Incidents of elevated radiation or contamination levels will be announced over the site intercom system.

EP at 3-6 to 3-7.

Radiation monitoring is also addressed in the Applicant's Environmental Report ("ER"). For example, Section 6.2, "Proposed Operational Monitoring Programs," specifically addresses the methods and equipment for radiation monitoring at the PFSF:

> Airborne monitoring will be performed in the Canister Transfer Building during canister handling operations if a radiological survey identifies contamination on the canister, or if contamination is found in the shipping cask of the canister being handles. The monitoring will be done using portable monitors. The Canister Transfer Building will also use area radiation monitors for monitoring the general building dose rate from casks and canisters during canister transfer operations.
>
> TLD's [Thermoluminescent Dosimeters] will be used along the boundaries of the Restricted Area and Owner Controlled Area to record radiation dose data.

ER at 6.2-1.

Radiation monitoring is also discussed in the Applicant's Safety Analysis Report ("SAR"). For example, Section 6.2, "Operational Considerations," states that radiation monitoring for the PFSF is provided by

> the use of area radiation monitors in the Canister Transfer Building and TLDs around the RA and OCA boundaries. In addition, radiation protection personnel will use portable monitors during shipping cask receipt, inspection, and canister transfer operations, and the operating staff will have personal dosimetry (Section 7.5.2). . . . Airborne monitoring will be performed using portable monitors as needed. A low-radiation background counting room is included in the Security and Health Physics Building.

SAR at 7.1-11.

The Safety Analysis Report also identifies the PFSF personnel responsible for performing radiation monitoring:

> Responsibilities of radiation protection technicians include the following:
>
> - Conduct radiation, contamination, and airborne surveys and prepare complete and accurate records . . .
>
> - Identify and post radiation, contamination, hot article, airborne and radioactive material areas in accordance with 10 CFR 20 requirements
>
> - Monitor PFSF operations to assure good radiological work practices . . .
>
> - Maintain and calibrate portable monitoring instruments. . .
>
> - Participate in the event of an emergency, as required.

Id. at 7.5-2.

The Safety Analysis Report also describes radiation monitoring equipment available at the PFSF. It includes "[a] sufficient inventory and variety of operable and calibrated portable and fixed radiological instrumentation . . . to allow for effective measurement and control of radiation exposure and radioactive material." Id. The radiation monitoring equipment at the PFSF "will be appropriate to enable the assessment of sources of gamma, neutron, beta, and alpha radiation, including the capability to measure the range of dose rates and radioactivity concentrations expected." Id. at 7.5-2 to 7.5-3. The "[p]ortable survey and personnel monitoring instrumentation" available at the PFSF will include, but not be limited to, "[l]ow-level contamination meters," "[b]eta/gamma portable survey meters," "[a]larming beta/gamma personnel friskers," and "[p]ortable air samplers." Id. at 7.5-3.

OGD's contention neither acknowledges, addresses, nor challenges the validity of, any of the many descriptions of radiation monitoring methods and equipment in the Applicant's Emergency Plan, Environmental Report, and Safety Analysis Report. See generally, OGD Petition at 19. OGD's unsupported assertion that the license application fails to provide adequate radiation monitoring to facilitate radiation detection, event classification, emergency planning, and notification (See OGD Petition at 19) must be rejected both for failing to provide any basis and specificity, and for mistakenly alleging that the Applicant did not address a relevant issue. To establish a basis for litigation, a contention must either allege with particularity that an applicant is not complying with a specified regulation, or allege with particularity the existence of a detail of a substantial safety issue on which the regulations are silent. A statement that simply alleges that

some matter ought to be considered does not provide a sufficient basis for an admissible contention under the Commission's regulations. OGD's contention that the license application fails to provide adequate radiation monitoring is "fatally flawed" and must be dismissed. See Section II.C.1, supra at 13.

b) The License Application fails to describe methods and equipment needed to assess releases outside of PFSF site.

In the second part of this contention, OGD asserts that the license application fails to meet requirements of 10 C.F.R. § 72.32(a)(6) because it does not describe the methods and equipment to assess releases of radioactive material outside of the PFSF site. This contention must also be rejected because it fails to meet the Commission's regulations for admissible contentions. 10 C.F.R. § 2.714(b). As with subpart (a) the contention is totally devoid of any supporting bases. Furthermore, it again ignores, and fails to dispute relevant information in the License Application.

10 C.F.R. § 72.32(a)(6), on "Assessment of releases," which OGD claims the Applicant fails to satisfy, requires the license application to provide:

> A brief description of the methods and equipment to assess releases of radioactive materials.

10 C.F.R. § 72.32(a)(6) (emphasis added). OGD's contention claims -- mistakenly -- that the Applicant's license application has no "description of the methods and equipment to assess releases of radioactive material" and provides "nothing that addresses releases outside the ISFSI site." OGD Petition at 19 (emphasis added). Aside from citing the

regulation, 10 C.F.R. § 72.32(a)(6), OGD provides no basis or support of any kind for this contention.

Contrary to OGD's assertion, the license application does address the "methods and equipment to assess releases of radioactive materials," as required by 10 C.F.R. § 72.32(a)(6), and does address "releases outside the ISFSI site." The discussion of the license application in the response to this contention, supra, demonstrated many examples in the Applicant's Emergency Plan, Environmental Report, and Safety Analysis Report that address the "methods and equipment to assess releases of radioactive materials."

Also directly contrary to OGD's baseless contention, the license application explicitly addresses the assessment of "releases outside the ISFSI site." OGD Petition at 19. The Safety Analysis Report and the Environmental Report explicitly evaluate the maximum bounding dose to persons "outside the ISFSI site" from postulated events that lead to releases of radioactive material from the PFSF. See SAR, Sections 8.1.5 and 8.2.7; see ER, Section 5.1.[102] The analysis for the "postulated release of surface contamination from the canister exterior" concluded that the maximum offsite dose would be 4.4 x 10-3 mrem committed effective dose equivalent (CEDE), and 2.6 x 10-2 mrem committed dose equivalent to the lungs, to an individual assumed to be standing at the site boundary. See ER at 5.1-2. This is well within the Commission's annual regulatory limit of 25 mrem. See 10 C.F.R. § 72.104(a). This analysis assumes a worst

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[102] These bounding calculations and their results are discussed in more detail in "Applicant's Response to Castle Rock Contention 18."

case scenario for the person's location and for atmospheric dispersion characteristics to ensure the analysis is bounding. See id.

The analysis of a "hypothetical breach of the canister" concluded that the maximum offsite dose would be 0.752 rem committed effective dose equivalent (CEDE), and 3.48 rem committed dose equivalent to the lungs, to an individual assumed to be standing at the site boundary. See ER at 5.1-4 to 5.1-5. This is within the Commission's regulatory limit of 5 rem. See 10 C.F.R. § 72.106(b). This analysis assumes a worst case scenario for the person's location and for atmospheric dispersion characteristics to ensure the analysis is bounding. See ER at 5.1-4 to 5.1-5.

These worst-case bounding doses are used in the Applicant's accident assessment and notification plan. In the event of a postulated canister breach accident with the potential for offsite releases of radioactivity, the initial assessment of offsite dose rates will be based upon the worst-case bounding dose analysis. This is discussed in Section 3.3, "Accident Assessment," of the Emergency Plan:

> In the event of a loss of canister confinement accident, which has the potential for the release of fission products from the canister, the emergency response system will be activated and dose rates will initially be assigned based upon the worst-case doses calculated in the PFSF SAR accident analysis. This analysis assumed canister breach in addition to failure of fuel rod cladding of all the fuel rods stored in a canister. A conservative fraction of the fission products and activation products contained in the spent fuel were postulated to be released to atmosphere under worst case meteorological conditions. As a result of conservatism in the analysis, assigned dose rates will be greater than actual dose rates.

EP at 3-7 to 3-8 (emphasis added). The PFSF will revise the worst-case bounding offsite dose assessment to reflect actual dose rate projections as data becomes available from emergency response survey teams. See EP 3-2, 3-8, 3-9, 4-2, 5-5, 6.2:

> Actual dose rates will be projected as data from the emergency response radiological survey team(s) become available. When the emergency response organization is staffed, the radiological monitoring team will be dispatched to perform surveys and assess the extent of contamination from the release. Surveys typically include measurements of radiation levels, surface contamination levels, airborne activity and soil contamination, as applicable.

Id. at 3-8; 5-5.

For the off-normal, postulated release of removable contamination from the external surface of a canister, the initial offsite dose assessment again assumes the worst-case bounding dose, which for this event is less than 1 mrem. See id. at 3-9. Radiation monitoring is again used to provide actual data to use for revised dose assessments:

> Assessment of radiological conditions following release of radioactivity from the outside surfaces of a canister will be performed by Radiation Protection personnel assigned to monitor canister transfer operations. An off-normal canister handling event will be detected by operators involved in the transfer operation, and Radiation Protection personnel would then conduct radiation and contamination surveys to assess the extent of contamination. . . . [T]he spread of contamination outside of the Canister Transfer Building is not anticipated. However, in the unlikely event significant levels of contamination are discovered inside the Canister Transfer Building, Radiation Protection personnel will assess the need to perform surveys outside the building to determine whether any contamination has spread to outside areas.

Id. at 3-9.

OGD's contention does not acknowledge, address, or challenge the validity of, any of the descriptions in the License Application addressing the methods and equipment to assess releases of radioactive materials, including offsite releases, from the PFSF. See OGD Petition at 19. OGD's contention that the Applicant's License Application fails to meet requirements of 10 C.F.R. § 72.32(a)(6) because it does not describe the methods and equipment to assess releases of radioactive material outside of the ISFSI site must be rejected as a contention that mistakenly claims that the applicant did not address a relevant issue in the license application.

H. OGD Contention H: The License Application Poses Undue Risk to Public Health and Safety Because It Fails to Provide Adequate Protection of the Site Against Intruders

1. The Contention

OGD alleges in Contention H that:

> 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 sight [sic] to be made by emergency personnel.

See OGD Petition at 20. The specific bases for the OGD contention are set forth at pages 20 to 22 of OGD's Petition. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated incorporating the specific allegations raised in its bases as follows:

> The license application poses undue risk to public health and safety because it fails to provide adequate protection of the ISFSI against intruders in that:

a) The only protection provided for the facility is a fenced perimeter, one layer of which will be a typical range fence.

b) The facility will have an intrusion detection system but one can only speculate about whether the facility's security system will be manned full time or by how many individuals because the security plan is not public information.

c) The Applicant has failed to address the ability of the storage casks to withstand a terrorist attack intended to breach the storage cask using high energy explosives. The Applicant is required to address at least two modes of attack:

(i) An attack in which explosives are applied directly against the storage cask, similar to attacks on shipping casks using weapons analyzed in Exhibits 3, 10, and 11. The design basis for this analysis must assume knowledgeable, heavily-armed intruders who are assumed to (i) approach the site undetected; (ii) disable the intrusion detection system; (iii) disarm any fixed anti-personnel weapons; (iv) penetrate the security fences; (v) gain unimpeded access to the storage casks for a period of at least 15 minutes during which a variety of explosive devices would be applied to various parts of the casks, such as military demolition charges, linear cutting charges, and multiple commercial shaped charges.

(ii) An attack in which adversaries use missiles or rocket-propelled explosives to project warheads against the storage casks from a distance. The design basis must include a variety of military weapons similar to those identified as threats to metal shipping casks in Exhibits 3 and 12. Among the missiles that should be considered are missiles specifically designed for attacking bunkers and field fortifications, such as (i) the U.S. Army's AT-8 Bunker Buster and (ii) the U.S. Army's SMAW (Shoulder-launched Multi-purpose Assault Weapon) armed with an HE Dual Purpose Warhead.

d) The ISFSI is in such a remote area that it would take at least two (2) hours for emergency personnel to make access to the site.

2. Applicant's Response to the Contention

OGD raises several issues under its Contention H. We address in turn below each of the specific allegations raised by OGD in Contention H as set forth above.

a) The Only Protection Provided is a Fenced Perimeter

As set forth above, OGD contends that a fenced perimeter is the only protection provided by the Applicant against intruders. This contention is, however, demonstrably incorrect, as shown by the License Application. A contention that mistakenly claims that the Applicant did not address a relevant issue in the license application must be dismissed. In setting forth a contention pursuant to 10 C.F.R. § 2.714(b), a petitioner is required to "read the pertinent portions of the license application, including the Safety Analysis Report and the Environmental Report, state the Applicant's position and the petitioner's opposing view." See 54 Fed. Reg. 33,168, 33,170 (1989) (Commission discussing its revised, higher threshold for admissibility of contentions).

The Applicant's license application, however, clearly shows that a fenced perimeter is not the only protection provided against intruders. Section 1.4, "Description of the PFSF" in the PFSF Emergency Plan states that the PFSF is protected by:

- an 8 foot high chain link security fence surrounding the Restricted Area

- light poles surrounding the Restricted Area inside the security fence

- an isolation zone beyond the first security fence

- an 8 foot high outer chain link nuisance fence at the outside of the isolation zone beyond the security fence

- an intrusion detection system between the two fences, and

- a barbed wire range fence at the boundary of the Owner Controlled Area.

See PFSF Emergency Plan at 1-5. Furthermore, the nearest location where spent fuel canisters are stored or handled within the isolated restricted area is more than 500 meters from the boundary of the site Owner Controlled Area and the barbed wire range fence, well beyond the 100 meter isolation distance required by the Commission's regulations. See PFSF Emergency Plan at 1-5, 1-6; 10 C.F.R. § 72.106(b) (100 meter requirement).

In addition to these extensive protection measures, the spent fuel stored at the PFSF will be enclosed in "massive concrete and steel structures" with walls "approximately 2 1/2 feet thick." See PFSF Emergency Plan at 2-2. The Commission has explicitly recognized that an approved storage cask is a physical protection "barrier offering substantial penetration resistance." See 60 Fed. Reg. 42,079, 42,084 (1995) (proposing 10 C.F.R. § 73.51 to "codify existing practice for the safeguarding of stored spent nuclear fuel," Id. at 42,079.). In the Commission's 1984 Waste Confidence Rulemaking, the Commission concluded that "the weight and size of the sealed, protective enclosures which may include 100-ton steel casks . . . and surface concrete silos" make "dry spent fuel storage . . . relatively invulnerable to sabotage." Rulemaking on the Storage and Disposal of Nuclear Waste (Waste Confidence Rulemaking), CLI-84-15, 20 NRC 288, 365 (1984) (published in 49 Fed. Reg. 34,658 (1984)). The

Commission reviewed these conclusions five years later in the Waste Confidence Decision Review and concluded that

> no considerations have arisen to affect the Commission's confidence since 1984 that the possibility of a major accident or sabotage with offsite radiological impacts at a spent-fuel storage facility is extremely remote.

55 Fed. Reg. 38,474, 38,512 (1990). OGD's failure to accord recognition to the Commission's conclusion that an approved storage cask is a substantial barrier for physical protection is a contention that seeks to litigate a generic determination established by Commission rulemaking. Such a contention is "barred as a matter of law." Pacific Gas and Electric Company (Diablo Canyon Nuclear Power Plan, Units 1 and 2), LBP-93-1, 37 NRC 5, 30 (1993).

In sum, OGD's contention claiming that a fenced perimeter is the only protection provided by the Applicant must be dismissed. OGD ignores both Applicant's "fences," and ignores entirely the barrier provided by the cask. Moreover, OGD has not shown any reason why a fenced perimeter, and the rest of the Applicant's physical protection system, is inadequate under the Commission's regulations on physical protection for ISFSIs. To establish a basis for litigation, a contention "must either allege with particularity that an Applicant is not complying with a specified regulation, or allege with particularity the existence and detail of a substantial safety issue on which the regulations are silent." Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), LBP-82-106, 16 NRC 1649, 1656 (1982). A statement "that simply alleges that some matter ought to be considered" does not provide a sufficient basis for an admissible contention

under the Commission's regulations. OGD's contention does not provide a sufficient basis for an admissible contention under 10 C.F.R. § 2.714(b). See Section II.C.1, supra.

b) Manning of Security System

As set forth above, OGD contends that one can only speculate about whether the facility's security system will be manned full-time or by how many individuals because the PFS security plan is not public information. As discussed under section a, supra, a petitioner is required to "read the pertinent portions of the license application, including the Safety Analysis Report and the Environmental Report," 54 Fed. Reg. at 33,170, and any contention that mistakenly claims that the Applicant did not address a relevant issue must be dismissed. OGD overlooks many locations in Applicant's license application stating that the facility will have "security coverage 24 hours a day, 7 days a week." PFSF Emergency Plan at 4-1. See also id. at 3-2 ("Security and Health Physics Building is manned 24 hours a day"); id. at 3-6 (same).

OGD also contends that it does not know how many individuals are on the facility's security force. The number of security guards available to respond to events at the facility is protected information that is contained only in the Applicant's security plan, and not in other, publicly-available parts of the license application, pursuant to 10 C.F.R. § 73.21. See Pacific Gas and Electric Company (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-653, printed as an attachment to CLI-82-19, 16 NRC 53, 104 (1982). A contention challenging the contents of an Applicant's security plan must be dismissed absent identification by the petitioner of a qualified security plan expert

capable of reviewing the plan under a protective order. Duke Power Company (Catawba Nuclear Station, Units 1 and 2), LBP-82-51, 16 NRC 167, 176-77 (1982). Absent satisfaction of this condition, the contention must be dismissed as "impermissibly vague" (id. at 177) because a petitioner cannot meet its burden to "show that a genuine dispute exists with the Applicant on a material issue of law or fact." 10 C.F.R. § 2.714(b)(2)(iii). OGD has not satisfied this condition and therefore this contention should be dismissed because it fails to provide a sufficient basis as required by the Commission's regulations.

c) Design Basis Threat of Use of Explosives for Security Plan

(i) Scenario and Explosive Devices for Application of Explosive Directly Against the Storage Cask

As set forth above, OGD contends that the design basis threat for sabotage at the PFSF must include a specific scenario in which "explosives [are applied] directly against the storage cask" by "knowledgeable, heavily-armed intruders" who are assumed to:

- approach the site undetected,
- disable the intrusion detection system
- disarm any fixed anti-personnel weapons
- penetrate the security fences, and
- gain unimpeded access to the storage casks for a period of at least 15 minutes.

See OGD Petition at 21. OGD further claims that the design basis threat must assume that a variety of explosive devices would be variously applied to the target, including "military demolition charges such as the M3A1 used in the Sandia full-scale truck cask test . . . applied to the cask lid," "a large quantity of linear cutting charge . . . applied around the middle of the cask exterior," and "multiple commercial shaped charges . . . applied to various parts of the cask lid and exterior and detonated simultaneously." Id.

This contention must be dismissed for two reasons. First, there is no basis cited by the OGD for their highly imaginative scenario. One cannot simply assume all the security fails and intruders succeed. Second, it is an impermissible attack on the Commission's regulations pursuant to 10 C.F.R. § 2.758.

It is well established that "a licensing proceeding . . . is plainly not the proper forum for an attack on applicable statutory requirements or for challenges to the basic structure of the Commission's regulatory process." See Section II.B., supra. Thus a contention which collaterally attacks a Commission rule or regulation is not appropriate for litigation and must be rejected. Id.

The Commission's regulations define the design basis threat for which a licensee is to design safeguards systems to protect against acts of radiological sabotage at a nuclear facility. See 10 C.F.R. § 73.1(a)(1). See Diablo Canyon, ALAB-653, 16 NRC at 58-59. A particular type of nuclear facility (an ISFSI, for example) must be protected against the design basis radiological sabotage threats set forth 10 C.F.R. § 73.1(a)(1) only to the extent that they are referenced in sections of 10 C.F.R. 73 which are applicable to that particular type of nuclear facility. See Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 292 (1995). Thus, under the Commission's regulations, the design basis threat for radiological sabotage at a nuclear facility for which a licensee is to design safeguards systems "is . . . generic rather than site-specific." See Diablo Canyon, ALAB-653, 16 NRC at 74. Accordingly, there is "no requirement that the Applicant or [the NRC] staff perform 'site-specific analyses or

assessments of potential threats'" that are specific to the Applicant's proposed facility. Id. at 74.

The design basis threat for radiological sabotage for an ISFSI is clearly defined by the Commission's regulations. 10 C.F.R. 73.1(a)(1). The Commission-directed design basis threat for ISFSIs is:

> (i) A determined violent external assault, attack by stealth, or deceptive actions, of several persons with the following attributes, assistance and equipment: (A) Well-trained (including military training and skills) and dedicated individuals, (B) inside assistance which may include a knowledgeable individual who attempts to participate in a passive role (e.g., provide information), an active role (e.g., facilitate entrance and exit, disable alarms and communications, participate in violent attack), or both, (C) suitable weapons, up to and including hand-held automatic weapons, equipped with silencers and having effective long range accuracy, (D) hand-carried equipment, including incapacitating agendas and explosives for use as tools of entry or for otherwise destroying reactor, facility, transporter, or container integrity or features of the safeguards system and . . . .
>
> (ii) An internal threat of an insider, including an employee (in any position) . . . .

10 C.F.R. 73.1(a). The specific details further defining this design basis threat (for example, further definition of "hand-held automatic weapons") are classified and protected from public disclosure as safeguards information. See 10 C.F.R. 73.21. A contention which goes beyond the scope of the Commission-established design basis threat for ISFSI is a per se challenge to the Commissioner's regulations. Such a contention must be rejected as an impermissible collateral attack on the Commission's regulations pursuant to 10 C.F.R. 2.758. For example, the types of "weapons used by the

design basis attackers are established in the regulations." Diablo Canyon, ALAB-653, 16 NRC at 75. A petitioner can not require the proposed facility to take into account of various weapons that are not included in the regulations, such as "fixed-wing aircraft, helicopters, mortars, rocket launchers, grenade launchers, and anti-tank weapons." Id. (emphasis added).

Contrary to the clear Commission regulations and precedent set forth above, OGD contends that the design basis threat for the sabotage at the PFSF must include a specific scenario of intruders who "approach[] the site undetected, disabl[e] the intrusion detection system, disarm[] any fixed anti-personnel weapons, penetrat[e] the security fences, and gain[] unimpeded access to the storage casks for a period of at least 15 minutes" during which time they apply "a variety of explosive devices" to the spent fuel storage casks, including "military demolition charges such as the M3A1 used in the Sandia full-scale truck cask test . . . applied to the cask lid," "a large quantity of linear cutting charge . . . applied around the middle of the cask exterior," and "multiple commercial shaped charges . . . applied to various parts of the cask lid and exterior and detonated simultaneously." OGD Petition at 21. In essence, OGD attempts to establish a new, site-specific design basis threat for sabotage at the PFSF through its contention.

Commission regulations and precedent do not, however, allow a petitioner to concoct a new, site-specific design basis threat for radiological sabotage at a nuclear facility. Commission precedent clearly establishes that a petitioner can not require a proposed facility to perform site-specific analyses of potential threats developed by the petitioner. Diablo Canyon, ALAB-653, 16 NRC at 74. In a similar vein, it is well

established that a contention which "advocate[s] stricter requirements than those imposed by the regulations" is "an impermissible collateral attack on the Commission's rules" and must be rejected. See Section II.B. supra at 6. OGD's contention attempting to establish a new, site-specific design basis threat for sabotage at the PFSF must therefore be dismissed as an impermissible collateral attack on the Commission's regulations.

(ii) Use of Missiles or Rocket-Propelled Explosives to Project Warheads Against the Storage Casks from a Distance

As set forth above, OGD also contends that the design basis threat for sabotage at the PFSF must include "an attack in which adversaries use missiles or rockets to project warheads against the storage casks from a distance." OGD Petition at 21. Specifically, OGD contends that the design basis threat for the PFSF should include "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." OGD Petition at 22.

This contention must also be dismissed for the same two reasons. No basis is cited for this remarkable scenario, for example, that the weapons are that readily available and transportable. Further, this too is an impermissible attack on the Commission's regulations pursuant to 10 C.F.R. § 2.758. The Commission has defined the design basis threat of radiological sabotage for a nuclear facility in 10 C.F.R. § 73.1(a)(1). See Diablo Canyon, ALAB-653, 16 NRC at 59. As discussed in part (1) above, the design basis threat for a nuclear facility is generic rather than site-specific. See id. at 74. The design

basis threat defined by the Commission in 10 C.F.R. § 73.1(a)(1) does not include "missiles or rocket[-propelled explosives] to project warheads . . . from a distance." Furthermore, Commission case law has also established that the petitioner can not require the proposed facility to take into account various weapons that are not included in the regulations, including "mortars, rocket launchers, grenade launchers, and anti-tank weapons." Diablo Canyon, ALAB-653, 16 NRC at 75 (emphasis added).

Accordingly, OGD's contention that the design basis threat for the PFSF must consider "missiles or rocket-propelled explosives" is without an adequate basis and is a collateral attack on a Commission regulation that is not appropriate for litigation and must be rejected.

d) The ISFSI is in a Remote Area That Would Take at Least Two (2) Hours for Emergency Personnel to Access

As set forth above, OGD asserts that "[t]he site is in such a remote area that it would take at least two (2) hours for access to the sight [sic] to be made by emergency personnel." OGD Petition at 20. This one sentence is the total extent of OGD's contention on this issue. OGD provides no additional explanation or discussion of this issue. There is no requirement in the Commission's regulations that offsite response capability should be less than two hours away, or any other fixed time. OGD provides no regulatory basis, additional facts, or references whatsoever to support its assertion that two hours is inadequate for access to an ISFSI by offsite emergency responders. This contention must be rejected for failing to provide a sufficient basis for an admissible contention, as required by the Commission's regulations. 10 C.F.R. 2.718(b).

Furthermore, there is no Commission regulation that bars an ISFSI from being located in a "remote area." See generally 10 C.F.R. Part 72. To the extent that OGD is claiming there is, or should be, such a requirement, OGD's alleged contention must be dismissed as an impermissible attack on the Commission's regulations. 10 C.F.R. § 2.758. It is well established that a contention which "advocate[s] stricter requirements than those imposed by the regulations" is "an impermissible collateral attack on the Commission's rules" and must be rejected.

I. OGD Contention I: The Cask Design is Unsafe and Untested for Long Periods of Time

1. The Contention

The OGD petitioner alleges in Contention I that:

> 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.

See OGD Petition at 22. The asserted bases for the contention are set forth following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated incorporating as follows the specific allegations raised in its bases:

> The License Application poses undue risk to public health and safety in that:
>
> a) The License Application calls for use of a cask whose design is unsafe and untested for long periods of time.

b) The License Application calls for use of a cask that has not been certified for either transportation or long term storage.

c) Until the cask design is certified, there is no way the PFS can make the necessary description of their ability to operate the facility as planned, as required by 10 C.F.R. §72.22(e).

d) 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.

2. Applicant's Response to the Contention

OGD raises a number of issues under Contention I, which the Applicant addresses in turn below.

a) Use of a Cask Whose Design Is Unsafe and Untested

OGD asserts that the Applicant's 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." See OGD Petition at 22. A contention that challenges the capability of a shipping cask or a storage cask to perform its designed and certified function, is a challenge to NRC regulations governing the licensing of such a cask, 10 C.F.R. part 71 and 10 C.F.R. part 72, respectively. OGD asserts that 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 . . ." OGD Petition at 22 (emphasis added). The NRC in promulgating the design and certification requirements for shipping and storage casks has made the generic determination that such casks, including any specified testing measures, adequately protect public health and safety of

spent fuel while in transit or in storage. Part 71: 60 Fed. Reg. 50,248 ("10 CFR Part 71 Compatibility with International Atomic Energy Agency (IAEA)" Final Rule) (September 28, 1995); Part 72: 55 Fed. Reg. 29,181, 29,183 ("Storage of Spent Fuel in NRC-Approved Casks at Power Reactor Sites") (July 18, 1990). Full-scale testing is not required prior to certification of a spent fuel shipping cask or a spent fuel storage cask. Part 71: 10 C.F.R. § 71.41(a), State of Wisconsin, DPRM-86-5, 24 NRC 647, 652 (1986); Part 72: 55 Fed. Reg. at 29,185. Therefore, a contention against transporting spent fuel in NRC-approved shipping casks or storing spent fuel in NRC-approved storage casks, both in compliance with applicable regulatory requirements, is a direct challenge to the regulations and the NRC's generic determination made as part of both rulemakings. To be admitted, a contention may not attack a Commission rule or regulation, 10 C.F.R. § 2.758, and therefore such a contention must be dismissed.

Additionally, this contention does not provide any facts or technical analyses to support this claim. A petitioner is obligated "to provide the [technical] analyses and expert opinion" or other information "showing why its bases support its contention." Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 305 (1995). OGD here has failed to do so and thus this contention must be dismissed.

b) Use of a Cask that has not been Certified for either Transportation or Storage

OGD asserts that the Applicant's License Application "poses undue risk to public health and safety because it calls for use of a cask . . . which has not been certified for

either transportation or long term storage." See OGD Petition at 22. A contention that challenges a cask under review in another proceeding must be rejected as an impermissible allegation about the NRC staff's review, rather than a contention about the adequacy of the information in the License Application. Safety Analysis Reports for both of the cask systems utilized by the PFSF, the HI-STORM and the TranStor, have been submitted to the NRC and are actively undergoing Staff review in parallel with this proceeding. See SAR at 4.1-1. OGD contends that the "use of a cask whose design . . . has not been certified for either transportation or long term storage" is per se deficient because the Staff's review of the cask Safety Analysis Reports is not complete. See OGD Petition at 22.

The Commission has rejected the admissibility of this type of contention. The Commission addressed this issue in its 1989 rulemaking amending its Rules of Practice to "raise the threshold for the admission of contentions." See 54 Fed. Reg. at 33,168 (1989). In the Statement of Consideration for the final rulemaking, the Commission stated:

> The Commission also disagrees with the comments that § 2.714(b)(2)(iii) should permit the petitioner to show that it has a dispute with the Commission staff or that petitioners not be required to set forth facts in support of contentions until the petitioner has access to NRC reports and documents. Apart from NEPA issues, which are specifically dealt with in the rule, a contention will not be admitted if the allegation is that the NRC staff has not performed an adequate analysis. With the exception of NEPA issues, the sole focus of the hearing is on whether the application satisfies NRC regulatory requirements, rather than the adequacy of the NRC staff performance. See, e.g., *Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-728, 17 NRC*

> *777, 807, review declined, CLI-83-32, 18 NRC 1309 (1983).* For this reason, and because the license application should include sufficient information to form a basis for contentions, we reject commenters' suggestions that intervenors not be required to set forth pertinent facts until the staff has published its FES and SER.

54 Fed. Reg. at 33,171 (emphasis added). Without additional facts, which OGD does not provide to support this contention, OGD's contention that the License Application is deficient because it uses information or data from the HI-STORM and TranStor cask systems Safety Analysis Reports that for "a cask whose design . . . has not been certified" (OGD Petition at 22), must be rejected for failure to provide a sufficient basis for an admissible contention under clearly-established Commission's regulations and as an impermissible challenge to Commission regulations. See 10 C.F.R. §§ 2.714(b), 2.758.

Additionally, this contention does not provide any facts or technical analyses to support this claim. A petitioner is obligated to provide the technical analyses and expert opinion or other information showing why its bases support its contention. OGD here has failed to do so and thus this contention must be dismissed.

c) Inability to fully Describe Ability to Operate Facility until the Cask Design is Certified

OGD asserts that the Applicant's License Application "poses undue risk to public health and safety because . . . [u]ntil the [c]ask design is certified there is no way that PFS can make the necessary description of their ability to operated [sic] the facility as planned." OGD Petition at 22. According to OGD, the "general plan for carrying out the [licensing] activity" required by 10 C.F.R. §72.22(e) cannot be developed without a certified cask design. See OGD Petition at 22.

10 C.F.R. § 72.22(e) requires each applicant to submit, with the License Application,

> information sufficient to demonstrate to the Commission the financial qualifications of the applicant to carry out in accordance with the regulations in this Chapter, the activities for which the licensee is sought. The information must state . . . the general plan for carrying out the activity . . . .

10 C.F.R. § 72.22(e).

Contrary to OGD's contention, nothing in 10 C.F.R. § 72.22(e) requires an applicant to have an already approved certified cask in order to provide the information on "the general plan for carrying out the activity" called for by 10 C.F.R. § 72.22(e). Indeed, such a reading would produce a nonsensical result. OGD's interpretation would mean that the Commission acted illegally in licensing the three site specific ISFSIs approved after promulgation of the cask certification rates. See NUREG-1350, vol. 9, NRC Information Digest, App. H; 55 Fed. Reg. 29191 (1990) (promulgating Part 72, Subparts K and L). The contention is wholly inconsistent with NRC regulations and must be rejected. Further, OGD has provided no basis to support this subcontention and it must be dismissed for lack of basis as well.

d) Inability to Complete Environmental Impact Statement Until the Cask Design Is Certified

OGD asserts that the Applicant's License Application "poses undue risk to public health and safety because . . . 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." See OGD Petition at 22. A contention must be based on environmental issues raised by the applicant's Environmental Report, not awaiting the Staff's environmental review. 10 C.F.R. § 2.714(b)(2)(iii), 54 Fed. Reg. 33,168, 33,171 (1989), as corrected, 54 Fed. Reg. 39,728 (1989). Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), CLI-93-3, 37 NRC 135, 154 (1993). OGD has failed to do so, and thus this contention must be dismissed.

Additionally, this contention does not provide any facts or technical analyses to support this claim. A petitioner is obligated "to provide the [technical] analyses and expert opinion" or other information "showing why its bases support its contention." Georgia Institute, LBP-95-6, 41 NRC at 305. There is simply no logical connection between a certified cash design and the information required to perform the required NEPA review. If, for example, Applicant had referenced a cask design which was not in the process of certification but rather was to be the subject of a site specific review, OGD's logic would mean that the License Application could never be reviewed, since the cask design would not be approved before the licensing process was completed. OGD has failed to do so, and thus this contention must be dismissed.

J. OGD Contention J: The License Application Fails to Address the Status of Compliance with all Permits, Licenses and Approvals Required for the Facility

1. The Contention

OGD alleges in Contention J that:

> 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.

OGD Petition at 23. The asserted bases for the contention are set forth in pages 22-23 of discussion following the contention.[103] In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its bases:

> 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 in that
>
> a) The Environmental Report fails to address federal certifications and permits as required by 10 C.F.R. §§ 51.71(c) and (d).
>
> b) PFS's activities and accident recovery may contaminate the area water supply.
>
> c) NRC has a special obligation to the members of OGD by virtue of the federal trust responsibility for Indian lands.

2. Applicant's Response to the Contention

a) Failure to Address Federal Certifications and Permits

As the basis for its contention, the OGD asserts that, contrary to the requirements of 10 C.F.R. §§ 51.71(c) and (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 [sic] of a stationary source permit." OGD Petition at

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[103] As part of its basis OGD incorporates "Contention A and the accident discussion found in this document." OGD Petition at 24. Applicant's response to the accident discussion in Contention A is fully addressed in its response to that contention.

23. This contention must be dismissed because OGD has completely ignored relevant material in the Environmental Report.

The regulations cited by OGD require inclusion in the Draft Environmental Impact Statement ("DEIS") of a description of "all Federal permits, licenses, approvals, and other entitlements which must be obtained in implementing the proposed action and . . . the status of compliance with those requirements." 10 C.F.R. § 51.71(c). This regulation, of course, poses no obligation on Applicant or its Environmental Report. (OGD fails to note that 10 C.F.R. § 51.45(d) imposes similar obligations on applicants.) Similarly, 10 C.F.R. § 51.71(d) directs the NRC staff to give due consideration to "compliance with environmental quality standards and requirements that have been imposed by Federal, State, regional, and local agencies having responsibility for environmental protection, including applicable . . . water pollution limitations or requirements promulgated or imposed pursuant to the Federal Water Pollution Control Act." Unlike 10 C.F.R. §§ 51.45(d) and 51.71(c). There is no parallel provision which imposes the obligations of § 51.71(d) on applicants.

Not only does OGD cite as a basis for its position a regulation which has no application, it ignores the fact that these requirements are in fact discussed in Chapter 9 of the Environmental Report. That chapter discusses the various federal and state permits that must be obtained before the ISFSI may become operational. Included in that discussion are permits and licenses that must be obtained from the NRC (ER § 9.1.1), Department of Transportation ("DOT") (ER § 9.1.4), Environmental Protection Agency

("EPA") and the Corps. of Engineer ("COE") (ER § 9.1.3) and Utah Department of Environmental Quality ("UDEQ") (ER § 9.2.1)

OGD does not address this information in the Environmental Report concerning required permits. A contention that mistakenly claims that the applicant failed to address a relevant issue in the application -- such as OGD Contention J -- must be rejected. See, Section II.B.3, pp. 15-16, supra.

b) Contamination of Area Water Supply

OGD argues that, despite the precautions to be taken, accidents may occur and there is the possibility that the accident would be cleaned up using existing water which would then become contaminated. OGD Petition at 24. In addition, OGD claims that "other activities" will require the use of water to clean contaminated parts and that unspecified provisions need to be made so that this water may not contaminate the "already sparse water" supply and have an adverse effect on the members of OGD. OGD Petition at 24.

This contention must be dismissed for ignoring information in the License Application and for failing to provide a factual basis. OGD ignores relevant information submitted in both the SAR and the environmental report which evaluates and concludes that no contamination of the ground water will occur. The storage system designs for the PFSF specifically use only seal welded metal canisters to preclude any radioactive effluents from the canister internals. See SAR at 7.1-5, 7.5-4. Based on the use of such canisters, the Environmental Report states:

> Under normal and off-normal conditions of transport, handling, storage, and removal offsite, the potential does not exist for breach of the canister and release of radioactive material associated with the spent fuel from inside the canister. . . . there are no credible scenarios that release effluents.

ER at 6.2-1. Further, the storage casks themselves are monitored for surface contamination in the Canister Transfer Building, and decontaminated in the unlikely event that they pick up any removable contamination in the event of an off-normal condition, such as a canister mishandling event. See SAR at 6.4-2. The storage casks are only moved outside of the Canister Transfer Building for storage after a contamination survey determines they are free of removable contamination. Id. Thus, "[d]uring spent fuel storage, no releases of any type of radioactive material occur. Therefore, there are no radiological waste impacts from the storage of spent fuel." Id. at 6.5-2. Because there are no releases of any type of radioactive material from spent fuel storage, surface water runoff from the PFSF storage area cannot contain any radioactive effluents. OGD has ignored this relevant information and therefore this subcontention must be dismissed.

Further, OGD fails to state what type of accident it has in mind or what type of clean up scenario would result in contaminated water. Nor does OGD explain how such water, if in fact it was used to clean contaminated equipment, would contaminate the water supply used by OGD's members. Nor does it specify what "other activities" will require the use of water. Furthermore, OGD fails to state what "parts" may become contaminated and fails to provide a mechanism by which the contaminated water used to

clean up an accident would then contaminate the water supply. Finally, OGD fails to explain or describe the "adverse" effects likely to be felt by members of OGD.

Thus, this subcontention is also totally devoid of any factual basis and amounts to mere speculation by OGD. An unsubstantiated allegation as the OGD has set forth here is not to be admitted.

Nowhere in its bases does OGD supply facts or expert opinion to support its contention. Its purported bases are mere speculation, expressions of the OGD's opinion without affidavit support, and thereby fall far short of the requirements for admissibility of a contention.

c) Federal Trust Obligation to Protect Indian Tribes

OGD also asserts that the NRC, as an agency of the United States, has a "special obligation" to protect the members of OGD from the harm of contaminated water because of the federal government's trust responsibility over Indian lands. The federal trust doctrine has no application here, however. OGD misunderstands both the general obligation of the NRC to protect the general public health and safety under the Atomic Energy Act and the basic purpose and scope of the federal trust responsibility.

First, OGD's argument lacks merit in the context of a federal regulatory agency, such as the NRC, which regulates for the public health and safety. Under the Atomic Energy Act, the Commission is charged to protect the health and safety of all the public, not selected classes as urged by OGD. Nothing in that Act requires -- or allows -- the NRC to apply a different set of standards to the members of OGD, or any other special

group. Such preferred treatment would be contrary to its basic mandate under the Act. Nor does OGD cite, as it cannot, any treaty, statute or other agreement which creates any "special obligation" on the part of the federal government toward its members regarding matters arising under the Atomic Energy Act.

Second, OGD misunderstands the basic purpose and scope of the federal trust responsibility. The Supreme Court has long "recognized the distinctive obligation of trust incumbent upon the Government in its dealings with [Indian tribes]." See, e.g. Seminole Nation v. United States, 316 U.S. 286, 296 (1942); Nevada v. United States, 463 U.S. 110, 127 (1983). However, in this instance, the proper party entitled to assert the benefit of a trust responsibility is the federally recognized Skull Valley Band of Goshute Indians, not a group of individuals, some of whom are not even members of the Skull Valley Band. The Interior Board of Indian Appeals has rejected on many occasions attempts of individual tribal members to assert the federal trust responsibility in situations in which an Indian tribe is the landowner. See e.g., Robert and Khrista Johnson v. Acting Phoenix Area Director, 25 IBIS 18.[104] Here the Skull Valley Band, not OGD or its

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[104] As stated by the Interior Board of Indian Appeals in that case:

> BIA's trust duty is dependent upon the existence of a trust res. Here, the trust res is the real property which is held in trust for the Tribe. The Board has recently reiterated that, in situations involving trust real property, BIA's trust duty is to the Indian landowner. See Welmas v. Sacramento Area Director, 24 IBIA, 264, 272 (1993); Gullickson v. Aberdeen Area Director, 24 IBIA 247, 248 (1993). The landowner here is the Tribe, and BIA's trust duty is to the Tribe.
>
> Any assumption that BIA also owes Krista [the individual Indian who was lessee of the Tribe] a trust duty must be based on the fact that she is Indian and a tribal member. The Board has considered numerous situations in which Indian individuals or tribes, each claiming to be the beneficiary of a trust duty, were involved on opposite sides in a dispute concerning trust real property. See, e.g.,

members, is the beneficial owner of the Skull Valley reservation lands over which it exercises jurisdiction. In fact, the members of OGD have asserted no claim of ownership to the lands in question.

Thus, to the extent any party is entitled to assert the benefit of the federal trust responsibility over Indian lands, it is the Skull Valley Band and not OGD or its members. Individual members of an Indian tribe may not invoke the federal trust responsibility to set aside a duly considered decision by the tribal government, even in a situation where individual property rights are alleged, which is not the case here. The federal courts have rejected, for example, suits brought by individual tribal members charging the Secretary of the Interior with having breached the federal trust responsibility for approving leases between Indian tribes and outside entities. See e.g., Tewa Tesuque v. Morton, 498 F.2d 240, 243 (10th Cir. 1974), cert. denied 420 U.S. 962 (1975); Yazzie v. Morton, 59 F.R.D. 377 (D. Ariz. 1973). In rejecting such a challenge on grounds that individual tribal members had no standing to challenge a breach of the federal trust responsibility, the court in Yazzie v. Morton clearly set forth the relationship between an Indian tribe and its individual members as follows:

> Finally, the Tribe is an indispensable party [to the lawsuit] because the land in question is part of the Tribe's Reservation, any decision reached concerning the land directly affects the Tribe. Plaintiffs [individual tribal

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Welmas; Gullickson; Smith v. Acting Billings Area Director, 18 IBIA 36 (1989). In those cases, the Board held that BIA's trust duty was still to the landowner, and no trust duty was owed to other persons involved in the matter, even though those persons might be Indian. The same is true here. In the context of this case, BIA owes no trust duty to Krista, who is merely a person doing business with an Indian tribe.

> members] have no vested interest in any of the land involved, they are only permittees of the Tribe; their permits expire after a given period of time and at death. The Tribe has the superior and paramount interest in the land.
>
> The Tribe, in leasing the necessary lands to the intervenors [non-Indian companies] for the construction and operation of the power plant does so only as a Tribe consisting of all its members. Title 25, Section 415, U.S.C.A. Therefore, the Navajo Tribe in leasing the subject lands is acting in a communal capacity as a Tribe; in order for the plaintiffs [tribal members] to have any standing to bring suit, the Navajo Tribe is indispensable, since they only have an interest in the subject matter of this suit as members of the Tribe.

Id. at 383. None of the cases cited by OGD (Nevada v. United States, 463 U.S. 110 (1983); Morton v. Ruiz, 415 U.S. 199 (1973); or Seminole Nation v. U.S., supra) support OGD's claim that its members may invoke the Trust doctrine.

Thus, OGD and its individual tribal members cannot rely on the trust doctrine to overturn the decisions made by the Skull Valley Band as a whole. Therefore, OGD's contention is unsupported as a matter of law and should be rejected.

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

1. The Contention

OGD alleges in Contention K that:

> 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.

OGD Petition at 24. The asserted bases for the contention are set forth in a half page of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated incorporating the specific allegations in its bases as indicated below:

> 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, in that:
>
> a) There is not enough information in the License Application for an informed determination to be made about the financial capability of PFS to assure that the decommissioning of the ISFSI will be carried out after the spent fuel has been removed (citing 10 C.F.R. 72.22[(e)](3)).
>
> b) There are no assurances that other generating facilities will be allowed to use the ISFSI and there is no assurance that their financial capabilities will be sufficient to provide adequate mitigation should there be problems in the future.

2. <u>The Applicant's Response to the Contention</u>

OGD asserts in its contention that "[t]he 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." OGD Petition at 24. The basis for the contention, however, discusses wholly unrelated topics -- the need for the Applicant to provide assurance that it will have the capability to pay the costs of decommissioning the ISFSI after the spent fuel is removed and whether reactor licensees other than the current members of PFS, if they

use the PFS ISFSI, will provide assurance of their financial capabilities with respect to decommissioning the ISFSI. Id. The basis provides no factual support for a contention concerning allegedly unsafe spent fuel transportation casks. See id. Indeed, it does not even mention spent fuel casks, how the spent fuel casks might become unsafe, or why they might need to be returned to a reactor site. See id. Therefore, this contention must be dismissed because OGD has failed to provide "[a] concise statement of the alleged facts or expert opinion which support the contention . . . , together with references to those specific sources and documents . . . on which [OGD] intends to rely to establish those facts or expert opinion." 10 C.F.R. § 2.714(b)(2)(ii).

Moreover, clear regulatory constraints preclude a licensee from releasing for shipment a defective shipping cask or one with contaminated external surfaces above certain limits. See 49 C.F.R. § 173.443 and 10 C.F.R. § 71.87(I); see also Applicant's response to OGD Contention D (addressing the Applicant's measures to deal with potentially damaged or contaminated casks). A contention premised on the proposition that a licensee will violate regulatory requirements must be rejected. "[T]o gain the admission of a contention founded on the premise that [the Applicant] will not follow these requirements, the [petitioner] must make some particularized demonstration that there is a reasonable basis to believe [the Applicant] would act contrary to their explicit terms." General Public Utilities Nuclear Corporation (Oyster Creek Nuclear Generating Station), LBP-96-23, 44 NRC 143, 164 (1996). OGD has not attempted to make any such showing here, so the contention must be dismissed.

Furthermore, the contention lacks the required specificity. The Contention does not specify why the cask might become unsafe. See OGD Petition at 24. Further, it does not identify how the shipping casks -- which are designed and certified to meet the rigorous requirements of 10 C.F.R. Part 71 in order to confine radioactivity during transit -- become unsafe. See id. Thus, this aspect of the contention must be dismissed for not containing "a specific statement of the issue of law or fact to be raised or controverted." 10 C.F.R. § 2.714(b)(2); Duke Power Company (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 NRC 460, 467 (1982), vacated in part on other grounds, CLI-83-19, 17 NRC 1041 (1983) ("a Board may not admit for any reason, a contention that falls short of meeting the specificity requirements of 10 §2.714(b)(2)") (emphasis in original).

a) Information Regarding the Financial Capability of PFS to Assure Funds for Decommissioning

Next the Applicant responds to the basis for OGD's contention, treating it as two subcontentions. In the first subcontention, OGD alleges that "[t]here 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 a part 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." OGD Petition at 25.

First this subcontention must be dismissed because it is non-specific. See supra. OGD does not specify what information the Applicant has omitted regarding its financial capability or decommissioning funding plan or why that information is necessary to make

the application adequate. Thus, OGD has failed to provide "a specific statement of the issue of law or fact to be raised or controverted." 10 C.F.R. § 2.714(b)(2); Catawba, ALAB-687, 16 NRC at 467. Second, the failure to provide any factual evidence or supporting documents that produce some doubt about the adequacy of a specified portion of the application or that provides supporting reasons that tend to show that there is some specified omission from the application is a failure to demonstrate a genuine issue of fact. Florida Power and Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-90-16, 31 NRC 509, 521 n.12 (1990) (citing 10 C.F.R. § 2.714(b)(2)(ii) and (iii)). Because OGD has provided no factual evidence or documents to support its claim or reasons to show that there is a specific omission from the application, it has failed to show a genuine dispute on a material issue of fact and this subcontention must be dismissed.

This subcontention must also be dismissed because contentions regarding the accuracy or completeness of a decommissioning plan (or decommissioning funding plan) are admissible only if the contention also shows that the alleged deficiency in the plan "has some independent health and safety significance." Yankee Atomic Electric Company (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 256 (1996).[105] OGD claims no health or safety significance for the allegedly omitted information. See OGD Petition at 24. Petitioners must show "some specific tangible link between the alleged errors in the [decommissioning] plan and the health and safety impacts they invoke."

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[105] See also Applicant's response to State Contention S, in which the Applicant discusses the Commission's standards for admitting decommissioning contentions in more detail.

Yankee Nuclear, supra at 258. Here, OGD invoked no health or safety significance, so the subcontention must be dismissed. Nor may the Board infer such a significance from the petitioners' language. Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 304 (1995). A petitioner is obligated "to provide the [technical] analyses and expert opinion" or other information "showing why its bases support its contention." Georgia Tech, LBP-95-6, 41 NRC at 304. Where a petitioner has failed to do so, "the Board may not make factual inferences on [the] petitioner's behalf." Id. Therefore, the Board must rely on what the petitioners actually say in their contention and must not infer omitted support or meaning from its language or its tone.

Furthermore, this subcontention must be dismissed because challenges to the reasonableness of an applicant's decommissioning funding plan are not admissible unless the petitioners show that "there is no reasonable assurance that the amount will be paid." Yankee Nuclear, CLI-96-1, 43 NRC at 9 (1996). Without such a showing the only relief available would be "the formalistic redraft of the plan with a new estimate." Id. Such relief is not sufficient to warrant consideration of a contention because petitioners' are not entitled to it. Petitioners are only entitled to relief from the injury they rely upon to afford them standing in a hearing (id. at 6) and because a mere redrafting of a financial plan would have no effect on the physical events taking place at a facility (i.e., the potential health and safety threats that provide petitioners with standings), petitioners are not entitled to such relief. See id. at 6, 9. OGD makes no assertions that the Applicant will be unable to pay its decommissioning costs; it merely alleges that is it is unable to

make an informed determination about the financial capabilities of the members of PFS. OGD Petition at 24. Therefore, OGD is not entitled to the relief it seeks and the subcontention must be dismissed.

Furthermore, without some indication that an alleged flaw in a funding plan will result in an actual shortfall of funds needed for decommissioning, this subcontention does not satisfy the materiality requirement of 10 C.F.R. § 2.714. Yankee Nuclear, CLI-96-7, 43 NRC at 259. The legal standard is reasonable assurance of funds, not "ironclad" assurance. Id. at 260. Short of an allegation of a "gross discrepancy" in the decommissioning cost estimate, supported by the necessary factual basis, a charge alleging the inadequacy of the estimate or the funding plan will not be admitted. Id. OGD does not claim that the allegedly omitted information will show an actual shortfall of funds or a "gross discrepancy" in the Applicant's decommissioning cost estimate. See OGD Petition at 24. Therefore, this subcontention is also not material and must be dismissed.

b) Other Potential Users of the PFS ISFSI

OGD asserts that the License Application is inadequate because there are "no assurances that other generating facilities will be allowed to use the [ISFSI]" and there is no assurance that their financial capabilities "will be sufficient to provide adequate mitigation should there be problems in the future." OGD Petition at 25.

First, this subcontention must be dismissed because it is non-specific. OGD does not say who the other users of the ISFSI might be, why their financial capabilities might

be insufficient, and what problems in the future might require mitigation. OGD Petition at 24; 10 C.F.R. § 2.714(b)(2); Catawba, ALAB-687, 16 NRC at 467. Second, OGD has not shown that a genuine dispute with the Applicant exists regarding a material issue of law or fact. See Turkey Point, LBP-90-16, 31 NRC at 521 n.12; 10 C.F.R. § 2.714(b)(2)(iii). OGD has not provided any factual evidence or supporting documents that produce some doubt about the adequacy of the financial capabilities of other potential users of the ISFSI or that provides supporting reasons that tend to show that the Applicant has omitted from the application some specific material regarding the financial capabilities of other potential users. See OGD Petition at 25.

Moreover, this subcontention must also be dismissed because it is an ostensible challenge to the adequacy of the Applicant's decommissioning funding plan, yet it does not claim that the alleged inadequacy has any independent health or safety significance and it does not show that there is no reasonable assurance that the decommissioning costs will be paid. See supra Subcontention (a).

Finally, this subcontention must be dismissed because it ignores relevant material submitted by the Applicant. See Georgia Power Company (Vogtle Electric Generating Plant, Units 1 and 2), LBP-91-21, 33 NRC 419, 424 (1991); Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 247-48 (1993). The License Application states that PFS will enter into Service Agreements with customers through which the customers will commit to store their spent fuel at the ISFSI and PFS will commit to providing the customers with storage services. LA at 1-4. Pursuant to such Service Agreements, the customers will make pre-shipment

payments and annual storage fee payments. Id. Portions of the customer payments will be go into an externalized escrow account to fund storage cask decommissioning "prior to the receipt of each spent fuel canister at the PFSF." LA at 1-7 (emphasis added). The average cost of decommissioning each canister is estimated to be $17,000. Id. OGD neither alleges nor provides any basis for claiming that this amount is inadequate. OGD Petition at 24. "This method of funding provides prepayment of the storage cask decommissioning costs prior to any exposure of the storage cask to radiation or radioactive material, and therefore prior to the need for decommissioning." LA at 1-7. Thus the financial capabilities of the customers of PFS are irrelevant to decommissioning of the storage casks. If customers cannot prepay this amount, their spent fuel will not be stored at the ISFSI and the customers' financial qualifications are irrelevant. See Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-97-15, slip op. at 23 (December 18, 1997) (if facility cannot attract investors or customers, it cannot begin construction or operation; if facility "never begins operation, there is no risk whatever to public health and safety.") Because OGD has ignored this material, this subcontention must be dismissed.

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

1. The Contention

OGD alleges in Contention L that:

> 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.

OGD Petition at 25. In the discussion of the basis following this contention, OGD asserts that such persons being trained on the job "when they take over the critical job of handling nuclear fuel" will not be able to carry out their responsibilities under 10 C.F.R. § 72.32(7). Id at 26. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its bases:

> 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 in that personnel being trained on the job when they take over the critical job of handling nuclear fuel will not be able to carry out their responsibilities required by 10 C.F.R. § 72.32(7).

2. Applicant's Response to the Contention

OGD mistakenly concludes that the License Application provides that operators will not be trained for the specific job when hired. In support of this assertion, the Petitioner relies upon the statement in the License Application that "[o]f necessity, the first individuals certified may have to improvise in certain situations to complete the

practical factors." LA at 7-1. OGD cites 10 C.F.R. § 72.32(7) in support of its conclusory allegation that "[w]ith 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" and expresses deep concern for its members, "when personnel are not even trained when they take over the critical job of handling nuclear fuel." OGD Petition at 26.

This contention completely misreads and ignores relevant information in the License Application and SAR and therefore, must be dismissed. Contrary to OGD's contention, Chapter 7 of the License Application does not provide that operators will be "untrained for the job" when "they take over the critical job of handling nuclear fuel" at the Facility. What Chapter 7 actually says is that

> [t]he Operator Training Program will consist of a combination of on-the-job training (OJT) and classroom training leading to Certification. The OJT requirements will be documented in a set of Qualification Cards containing the Job Performance Measures of practical factors that are required to be performed by the Operator. Each person to become Certified must have these Qualification Cards completed prior to being allowed to independently perform the applicable tasks. Of necessity, the first individuals certified may have to improvise in certain situations to complete the practical factors . . . .

LA at 7-1 (emphasis added).

Thus, it is clear that the operators will receive their classroom training and on-the-job training prior to certification and prior to handling nuclear fuel at the PFSF. Before performing these or any other duties, operators will be trained and certified. As

specifically stated in the License Application, "prior to being allowed to independently perform the applicable tasks" the operator must have "Qualification Cards" completed and these cards are based on completion of on-the-job training. OGD has therefore misread the Application by alleging that operators will handle nuclear fuel before their training has been completed. The phrase latched on to by OGD, that "of necessity the first individuals certified may have to improvise in certain situations to complete the practical factors," thus refers to the fact that the initial operators will receive their on-the-job training prior to their certification and prior to their handling nuclear fuel, and that therefore completion of some training will be accomplished under simulated conditions. Simulation of actual operating conditions is a well established and recognized training technique in the nuclear industry, such as, for example, in the training and certification of nuclear plant operators. Regulatory Guide 1.8 (Qualification and Training of Personnel for Nuclear Power Plants).

Accordingly, no adverse impact on safety can be attributed simply to the fact that the first operators certified will have been trained in part under simulated conditions. OGD provides no factual basis -- only hyperbole -- to support its contention that the public health and safety is jeopardized by the fact that the first individuals certified may have to complete their training on the practical factors under simulated conditions. OGD has provided no facts, expert opinion or analysis to support its proposition that personnel trained under simulated practical conditions will jeopardize the public health and safety and fail to carry out their responsibilities during an emergency. In short, this contention

is nothing but "an expression of the [OGD's] opinion" and is therefore inadmissible. Georgia Tech, supra, LBP-95-6, 41 NRC at 306-7.

Further, OGD completely ignores provisions of the SAR which show that operators "take over the critical job of handling nuclear fuel" after they are properly trained and certified. SAR Chapter 9, which the OGD totally ignores, specifically states at § 9.3.1 that

> [i]t is the intent to hire individuals with the training, education and experience which enable them to perform the assigned tasks, and to provide additional training, as appropriate. There will be an adequate complement of trained and certified personnel prior to the receipt of spent fuel for storage, and throughout the period of the NRC operating license.

SAR at 9.3-1 (emphasis added). Further, SAR § 9.3.2.2 provides that "[i]ndividuals who operate equipment and controls that have been identified as 'important to safety' . . . must be trained and certified." SAR at 9.3-3. A contention which ignores relevant information submitted by the Applicant must be dismissed. See Section II.C.2 supra.

Finally, although OGD cites to 10 C.F.R. § 72.32(7), OGD has identified no absolute basis to support a contention that this regulation has been violated.

10 CFR § 72.32(7) provides that

> Each application for an ISFSI that is licensed under this part . . . must be accompanied by an Emergency Plan that includes the following information:
>
> . . .
>
> *Responsibilities.* A brief description of the responsibilities of licensee personnel should an accident occur, including

> identification of personnel responsible for promptly notifying offsite response organizations and the NRC; also responsibilities for developing, maintaining, and updating the plan.

10 CFR § 72.32(7) (emphasis in original). OGD fails to identify any respect in which the Applicant's Emergency Plan is deficient and in which it falls short of the regulatory requirements. Moreover, OGD fails to specify what practical factors, if performed under simulated rather than actual operating conditions, would result in the operators being unable to perform their assigned duties. Nor does OGD describe what emergencies might arise and what particular duties the personnel will be unable to carry out as a result of such training. OGD's failure to provide a factual basis for its contention that Applicant has violated 10 C.F.R. § 72.32(7) must result in the rejection of this contention.

M. OGD Contention M: No Provisions for Transportation Accidents are Made

1. The Contention

The OGD petitioner alleges in Contention M that:

> The license application poses undue risk to public health and safety because it makes no provisions for transportation accidents that might occur.

See OGD Petition at 26. The asserted bases for the contention are set forth following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows, incorporating the specific allegations raised in its bases:

> The License Application poses undue risk to public health and safety because it makes no provisions for transportation accidents that might occur in that

a) The Emergency Plan does not identify each type of radioactive material accident that may occur, which is required by 10 C.F.R. § 72.32(a)(2), particularly that involving a collision between a spent fuel heavy haul shipment and/or a collision between a truckload of military explosives to or from the Dugway Proving Ground on Skull Valley Road in a grade crossing accident, which could result in an explosion;

b) Even though the "potential for an explosion" near the site is recognized in the License Application, the Emergency Plan fails to provide provisions to deal with the collision between a spent fuel heavy haul shipment and/or a collision between a truckload of military explosives to or from the Dugway Proving Ground on Skull Valley Road in a grade crossing accident and the potentially resulting explosion from such an event, which could result in impact forces in excess of those specified in NRC transportation cask performance standards.

2. Applicant's Response to the Contention

OGD asserts in Contention M that the Applicant's License Application "poses undue risk to public health and safety because it makes no provisions for transportation accidents that might occur." OGD Supp. Petition at 26. OGD's concerns raised under Contention M are addressed in turn below.

a) Identification of Type of Radioactive Material Accident

OGD asserts that the Applicant's Emergency Plan does not identify each type of radioactive material accident that may occur, which is required by 10 C.F.R. § 72.32(a)(2). See OGD Petition at 26. OGD is particularly concerned with an accident involving a collision between a spent fuel heavy haul shipment and/or a collision between

a truckload of military explosives to or from the Dugway Proving Ground on Skull Valley Road in a grade crossing accident, which could result in an explosion. Id.

Contrary to OGD's assertion, the Applicant's Emergency Plan does evaluate "an accident associated with the transportation of explosives along the Skull Valley Road" and its effects on the site. Emergency Plan at 2-6. The analysis results show that "[t]he HI-STORM and TranStor storage casks protect the canisters from the effects of explosions" and "[t]he effects of credible explosions occurring on the Skull Valley Road, with resultant overpressures less than 1 psi at the PFSF, would not challenge the Canister Transfer Building's structural integrity." Id.; SAR at 8.2-21 to 8.2-23. A petitioner must set forth a "technical basis in references or expert opinion" in order to support a claim based on an accident scenario. OGD here has failed to do so and thus this contention must be dismissed.

Further, 10 C.F.R. § 72.32(a)(2) requires an ISFSI Emergency Plan to include, in part, "[a]n identification of each type of radioactive materials accident." 10 C.F.R. § 72.32(a)(2). The Applicant identifies applicable accidents in the Emergency Plan Chapter 2. The requirements for emergency plans for ISFSIs are for on-site emergencies only. See Northern States Power Company (Independent Fuel Storage Installation) Director's Decision under 10 C.F.R. § 2.206 (DD-97-24), 62 Fed. Reg. 51,916, 51,917 (1997). An on-site emergency does not include a spent fuel transportation accident that occurs off-site, even with a resulting explosion - - to the extent that the resulting explosion does not effect the site (as discussed above). The safety aspects of off-site transportation of spent fuel, including measures to address spent fuel transportation

accidents, are controlled by 10 C.F.R. Parts 71 and 73, and by DOT regulations, not by 10 C.F.R. Part 72. So to the extent that OGD seeks to include off-site spent fuel transportation accidents in the Applicant's ISFSI Emergency Plan, this contention must be dismissed as being beyond the scope of this proceeding. See Section II.B. supra.

b) Evaluation of Explosion Involving Off-Site Spent Fuel

OGD asserts that even though the 'potential for an explosion' near the site is recognized in the License Application, the Applicant's Emergency Plan fails to provide provisions to deal with a collision between a spent fuel heavy haul shipment and/or a collision between a truckload of military explosives to or from the Dugway Proving Ground on Skull Valley Road in a grade crossing accident and the potentially resulting explosion from such an event, which could result in impact forces in excess of those specified in NRC transportation cask performance standards. See OGD Petition at 26-27. As discussed in Applicant's response to subcontention (a) above, this contention lacks technical basis and is beyond the scope of this licensing proceeding, which is "for a materials license, under the provisions of 10 C.F.R. Part 72." See 62 Fed. Reg. 41,099 ("Private Fuel Storage, Limited Liability Company, Notice of Consideration of Issuance of a Materials License for the Storage of Spent Fuel and Notice of Opportunity for a Hearing") (July 31, 1997). A 10 C.F.R. Part 72 materials licensing proceeding is not the proper forum to address emergency measures for off-site transportation spent fuel accidents, and contrary to OGD's assertion, the Applicant does evaluate potential off-site explosions and their effect on the site. See Applicant's Response to OGD Contention (Subcontention (a)).

Additionally, a challenge to the capability of a shipping cask to perform its designed and certified function is a challenge to NRC regulations governing the licensing of such casks, 10 C.F.R. Part 71. OGD asserts that the potentially resulting explosion from "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 . . . could result in impact forces in excess of those specified in NRC [transportation] [c]ask performance standards." OGD Petition at 26. The NRC in promulgating the design and certification requirements for shipping casks has made the generic determination that such casks adequately protect public health and safety of spent fuel while in transit. 60 Fed. Reg. 50,248 ("10 CFR Part 71 Compatibility with International Atomic Energy Agency (IAEA)" Final Rule) (September 28, 1995). Therefore, a contention challenging the transportation of spent fuel in NRC-approved shipping casks in compliance with applicable regulatory requirements is a direct challenge to the regulations and the NRC's generic determination made as part of the rulemaking. To be admitted, a contention may not attack a Commission rule or regulation, 10 C.F.R. § 2.758, and therefore such a contention must be dismissed.

N. OGD Contention N: There May Be a Leak that Contaminates the Present Water System

1. The Contention

OGD alleges in Contention N that:

> The license application poses undue risk to public health and safety because it fails to address the possibility of a leak occurring 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.

OGD Petition at 27. OGD's basis for the contention, stated on the same page of its Petition, provides in its entirety as follows:

> 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.

In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows:

> The license application poses undue risk to public health and safety, in that
>
> a) It ignores NRC's trust responsibility to protect natural resources of Tribe and individual Tribal members.
>
> b) It fails to address the possibility of a leak occurring that might contaminate the present water system that members of the community rely on.
>
> c) The application admits that several wells are going to have go be built to meet the demand that will be presented by the facility but it fails to discuss the contingencies to deal with contamination or lowering of the present water table.

2. Applicant's Response to the Contention

Putting aside OGD's ill-founded trust argument, the sole basis provided for this contention is its statement that "[t]hese issues need to be addressed in the License Application." Id. (emphasis omitted). This is a totally inadequate statement of basis to

support the admission of a contention. As stated by the licensing board in Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC. 200, 246 (1993), a statement "that simply alleges that some matter ought to be considered" does not provide a sufficient basis for an admissible contention. The Commission's Rules of Practice specifically provide that if "the petitioner believes that the application fails to contain information on a relevant matter as required by law," the petitioner must identify "each failure and the supporting reasons for the petitioner's belief . . . ." 10 C.F.R. § 2.714(b)(2)(iii). As further stated in the Statement of Considerations for the 1989 amended rules, if the Petitioner believes that the License Application, including the Safety Analysis Report and the Environmental Report, fails to address a relevant issue, the petitioner is "to explain why the application is deficient." 54 Fed. Reg. 33,168, 33,170 (1989). OGD has failed to do so with respect to Contention N, and therefore that contention must be dismissed. See Section II.C.2 supra.

a) NRC's trust responsibility

OGD's discussion of the NRC's trust responsibility to protect the natural resources of the Tribe and the alleged trust responsibility toward individual Tribal members (who have no beneficial interest in reservation lands) misconstrues the trust responsibility doctrine to argue that the NRC has a special obligation to protect the OGD members from harm over and above its public health and safety obligations under the Atomic Energy Act. As discussed in Applicant's response to OGD Contention J, OGD's trust argument simply lacks any merit in the context of a federal regulatory agency, such as the NRC, which regulates private activity to protect the public health and safety of all

members of the public, not selected groups as urged by OGD. Accordingly, in NRC proceedings, members of Indian tribes must satisfy the same pleading requirements as other members of the public in order to intervene and raise issues for litigation in NRC proceedings. See, e.g., Sequoyah Fuels Corporation (Gore, Oklahoma Site), LBP-94-19, 40 NRC 9 (1994).

b) Possibility of Leak Which Might Contaminate Present Water System

Besides not providing support for its assertion, OGD is simply mistaken in its claim that the "license application . . . fails to address the possibility of a leak occurring that might contaminate the present water system that members of the community rely on." OGD Petition at 27. See SAR, Section 6.3. Moreover, the Petitioner's suggestion that a leak could contaminate ground water sources is incorrect. After the canisters are loaded, they are vacuum cleaned, backfilled with helium and welded closed. Hence, the inside environment of the canisters is a gas (helium), there are no liquids on the inside and the canisters are all seal welded to preclude liquids from entering them. Id. Consequently, there is no leak accident that would cause contaminate material to flow into the ground much less the ground water, which is over 100 feet below the surface. SAR, Section 2.5. OGD has failed to specifically identify the means by which a leak could occur that would affect the groundwater.

Thus, OGD's contention must also be rejected because its claim that the Applicant failed to address the possibility of a leak occurring which could possibly contaminate the

present water system is mistaken, as Applicant has addressed this issue. See Section II.C, pp. 15-16, supra.

c) Contamination or Lowering of Present Water Table

OGD's contention that Applicant did not discuss contingencies to deal with groundwater contamination or lowering of the present water table is mistaken and must be rejected. As described in detail in response to Castle Rock Contention 8, radioactive wastes are not generated at the site so groundwater contaminants are not considerations. SAR Section 6.3; ER Section 3.4. Lowering the present groundwater table is discussed in detail by Applicant; See SAR sections 2.5.3 and 2.6.1.9. Applicant also provides discussion on groundwater usage, describing how water storage tanks will be required to supply enough water (on-demand) for potable water, emergency fire water, and for the concrete batch plant. Applicant states that the Skull Valley aquifer will probably experience localized drawdown, but it will not extend beyond the PFSF site area. Applicant also states that additional testing and analysis will be performed to determine the number and depth of wells to be provided so that the drawdown will have no effect on adjacent existing wells. SAR Section 2.5.3. Therefore, OGD's contention must be rejected.

O. OGD Contention O: Environmental Justice Issues Are Not Addressed.

1. The Contention

OGD alleges in Contention O that:

> 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 (1959)

> 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.

OGD Petition at 27-28. The asserted bases for the contention are set forth in seven pages of discussion following the contention in which OGD claims that the NEPA cost benefit analysis in the Environmental Report is inadequate in six respects. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its bases:

> 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 (1959) 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 water: 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. The benefit-cost analysis in the ER is inadequate in that:

a) The proposed plant will have negative economic and sociological impacts on the native community of Goshute Indians who live near the site. The application demonstrates no attempts to avoid or mitigate the disparate impact of the proposed plant on this minority community.

b) The ER only discusses benefits to Skull Valley Band and fails to discuss the environmental, sociological and psychological costs of living within a few miles of the facility.

c) The ER does no benefit cost analysis of leaving waste on-site at reactors.

d) The ER discusses need for ISFSI to provide sufficient spent fuel capacity to avoid shutdown. This is questionable however. PFS should be required to evaluate existing and projected storage capacity both in the U.S. and abroad in order to evaluate existing and projected need.

e) Any environmental assessment must look at all hazardous facilities in the area as part of the cumulative and disproportionate impacts that OGD has been made to suffer. The ER fails to consider such disproportionate impacts that may be suffered by members of the Skull Valley Goshutes.

f) The ER fails to address the effect that the facility will have on property owned by members of OGD or others living in surrounding area.

2. Applicant's Response to Reliance on Executive Order 12898

OGD seeks in this contention to rely upon Executive Order 12898. That reliance is, however, misplaced for the express terms of the Order provide that it does not create new law and that it is solely intended for the internal management of executive branch agencies. Section 1-101 directs agencies to integrate environmental justice concerns into their programs to the extent "permitted by law." (Emphasis added). The President's Memorandum accompanying the Order reflects the same intent "to underscore . . . provisions of existing law that can help ensure that all communities and persons . . . live in a safe and healthful environment." (Emphasis added.) Further, Section 6-609 of the Order states:

> This order is intended only to improve the internal management of the executive branch and is not intended to, nor does it create any right, benefit, or trust responsibility, substantive or procedural, enforceable at law or equity by a party against the United States, its agencies, its officers, or any person. This order shall not be construed to create any right to judicial review involving compliance or noncompliance of the United States, its agencies, its officers, or any other person with this order.

Executive Order No. 12898, 3 C.F.R. 859, 863 (1994).

The courts have found executive orders containing language virtually identical to that contained in section 6-609 to reflect "clear and unequivocal intent" that the executive order is intended merely to "improve the internal management of the Federal government" and does not create substantive rights "subject to judicial review." See, e.g., Michigan v. Thomas, 805 F.2d 176, 187 (6th Cir. 1986). As stated by the court in Meyer v. Bush, 981 F.2d 1288, 1297 (D.C. Cir. 1993), "it is doubtful" whether such executive

orders "[have] any legal significance." Indeed, the only court to consider the legal significance of Executive Order 12898 found that section 6-609 expressly denies any private right of action and therefore the Order does not create any enforceable rights or obligations. See New River Valley Greens v. DOT., Civ. A. 95-1203-R, 1996 U.S. Dist. LEXIS 16547 at *16-17 (W.D. Va. Oct. 1, 1996), aff'd., 1997 U.S. App. LEXIS 32166 (4th Cir. 1997).

Because Executive Order 12898 creates no new enforceable rights or obligations, the provisions of the Order are not applicable in the context of licensing facilities and activities under the Atomic Energy Act. To apply the Executive Order in licensing proceedings, such as the present, would create an irreconcilable conflict with the Executive Order because such proceedings are subject to judicial review. 42 U.S.C. § 2239. Well-established principles of judicial review both authorize and require a court to review the basis of an agency's decision. See, e.g., Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins., 463 U.S. 29, 48-49 (1983); New England Coalition on Nuclear Pollution v. NRC, 727 F.2d 1127, 1131 (D.C. Cir. 1984) (courts "must affirm [agency] action on the basis of the reasons assigned or not at all"). Therefore, the Executive Order can not be applied to NRC licensing proceedings, for if so applied, it would become subject to judicial review, contrary to the express provision of section 6-609 of the Order.

Thus, the provisions of the Executive Order can neither enlarge nor otherwise alter requirements of NEPA. The scope and bounds of NEPA are explicated by the statute and applicable regulations and judicial precedent interpreting its requirements, and not the terms and provisions of Executive Order 12898. Accordingly, the adequacy of the

Environmental Report and any subsequent Environmental Impact Statement must be judged against the legal standards applicable under NEPA, and not the Executive Order, or OGD's construct of the Executive Order. Therefore, the contention should be rejected.

3. Applicant's Response to OGD's Specific Contentions

OGD raises various issues in Contention O which we discuss in turn below.

a) Negative Economic and Sociological Impacts on Native Community of Goshute Indians

OGD claims that the Environmental Report "does not reflect consideration of the fact that the plant is to be placed in the dead center of an Indian Reservation" and that the "Application does not demonstrate any attempts to avoid or mitigate the disparate impact of the proposed plant on this minority community." OGD Petition at 28-29. This contention must be dismissed for the lack of both a legal and a factual basis.

First, NEPA provides no legal basis for OGD to request mitigation of "disparate impacts." Under section 102(2)(C) of NEPA, agencies are required to analyze significant, adverse impacts on the physical environment resulting from major federal actions as well as proximately related secondary, socio-economic impacts. Nothing in NEPA suggests that either the significance of such impacts or the level of their mitigation are to be judged based on the race or economic status of those affected. NEPA has been in existence for more than 25 years and it has never been interpreted to require analysis of whether a particular major federal action will have a disproportionate impact on selected populations of differing race or economic class. As observed by the U.S. District Court in New River Valley Greens v. DOT, supra, LEXIS 16547, * 18 an agency "could not be

held to have violated NEPA for failing to consider disproportionate impacts on minorities and low-income populations" prior to the Executive Order because no such mandate exists under NEPA.

Therefore, the issue under NEPA is not whether a particular major federal action, such as licensing the PFSF, has a disproportionate impact on minority or low income populations, but whether there are significant, adverse impacts regardless of the population affected. Executive Order 12898 does not impose any different approach for NEPA evaluations. The provisions of section 1-101 are expressly limited "[t]o the greatest extent practicable and permitted by law." (Emphasis added.) Further, the Executive Order itself does not call on agencies to address merely disparate impacts. Rather, the Executive Order instructs Federal agencies to achieve environmental justice as part of their missions "by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects." Executive Order No.12898, 3 C.F.R. 859 (1994) (emphasis added).

Second, this subcontention must also be dismissed for lack of basis. Contrary to the amended rules of practice, OGD does not "reference the specific portions" of the Application that the OGD disputes and the "supporting reasons for [the] dispute." 10 C.F.R. § 2.714(b)(2)(iii), Also the only facts or documents or other support provided for this subcontention are a 1987 study, a 1993 letter, and a 1996 article completely unrelated to, and supplying no factual basis for, its assertions that the Environmental Report in this specific licensing proceeding is deficient.

Further, the License Application expressly addresses the very topics that OGD claims it fails to consider. The very first page of the License Application reflects that the proposed ISFSI would be "located on the Skull Valley Indian Reservation." LA at 1-1. Further, the Environmental Report expressly analyzes the persons living "within 5 miles of the PFSF" and sets forth that, included in the 36 persons within this area, are the "approximately 30 members of the Skull Valley Band of Goshute Indians living on the Reservation." ER at 2.7-9.

Further the Environmental Report notes that although "[t]here are no significant impacts associated with the project requiring mitigative measures," "[t]he design of the facility already provides mitigative measures to reduce potential impacts." ER at 2.7-10. Specifically:

> The facility will be located away from residences to prevent disruption to existing land uses and minimize the visual impact on the regional surroundings. Dust pollution will be minimized by dust control techniques. The facility is designed to use very little water and to provide radiation shielding to lower doses to residences greatly below the regulation limits.

Id.

Having failed even to reference the License Application, OGD sets forth no facts or basis to challenge the analysis and evaluation in the License Application and the subcontention must be dismissed for lack of basis and failure to show a genuine dispute of a material issue of fact or law as well as a lack of any legal basis to request mitigation of disparate impacts. See Section II.C, supra.

b) Failure to Address Environmental, Sociological and Psychological Costs

OGD claims that the Environmental Report only addresses the benefits to the Skull Valley Band and fails to discuss the environmental, sociological and psychological costs of those living close to the facility of added traffic, more people, cultural impacts on traditional life styles, stigmatization resulting from adverse impacts (real or perceived) of the storage facility, changes in traffic patterns and pervasive fear of living in close proximity to the biggest nuclear storage facility in the United States. This contention must be dismissed because (i) certain of the alleged costs are outside the zone of interest of the Atomic Energy Act and NEPA and (ii) other costs are addressed in the Environmental Report, which OGD ignores.

(i) Pervasive Fear and Stigmatization

OGD claims that the Environmental Report fails to address "the pervasive fear of living in close proximity to the biggest nuclear storage facility in the United States" and stigmatization resulting from adverse impacts (real or perceived) of the storage facility." However, as discussed further in Applicant's Response to OGD Contention P, subpart c, it is established in NRC proceedings that psychological effects are outside the zone of interest protected by NEPA and the Atomic Energy Act. Therefore, pervasive fear and stigmatization (real or perceived) do not fall within the grounds of NEPA and the Applicant made no error in failing to address such psychological costs in the Environmental Report.

(ii) Other Alleged Costs

OGD's claims with respect to the other costs allegedly not addressed in the Environmental Report must be dismissed for ignoring relevant information in the Report and for lack of basis. The Environmental Report does address the costs of added traffic, more people and changes in traffic patterns. As discussed in Applicant's Response to OGD P, subpart b, the Environmental Report addresses the added traffic and influx of workers. See ER §§ 2.8, 4.16, 4.1.7, 4.2.6 and 4.2.7. Further the Environmental Report also addresses whether the PFSF would have any adverse impact on cultural resources of the Skull Valley Band, and, based upon responses from the Band, and concluded that there were none. ER §§ 2.9.1, 4.1.8.1, 4.2.8.1. Finally, as part of the environmental justice evaluation, the Environmental Report summarizes in tabular form the potential adverse "human to health" and "environmental effect" on "the minority or low-income population surrounding the site." ER at 2.7-9 and Table 2.7.3.

In short, the Environmental Report has evaluated the potential sociological, adverse sociological and environmental impacts on the "minority or low-income population" surrounding the site and has concluded that none of the impacts "are significant, unacceptable or above regulatory limits." ER at 2.7-10. While OGD may desire a different result to this evaluation, NEPA "does not mandate particular results." Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989). Rather under NEPA, the Applicant must describe the environmental impacts of the proposed ISFSI, which Applicant has done. OGD has ignored this evaluation and as a result has failed to provide a basis and show a genuine dispute of a material issue of law or fact as required by the 10 C.F.R. § 2.714(b).

c) Cost-Benefit Analysis for Leaving Fuel at Reactors

OGD implies that the Applicant's Environmental Report is inadequate because it contains "no benefit-cost analysis . . . that looks at the alternative of leaving waste on-site at reactors until a safe solution is developed." OGD Petition at 30-31. "The rush to move dangerous nuclear waste across America 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." Id. (quoting Public Citizen News Release, Oct. 6, 1997, statement by Auke Piersma).

This subcontention must be dismissed because it mistakenly claims that the applicant failed to address a relevant issue in the application. See Section II.C, pp. 15-16, supra. The Environmental Report specifically discusses the "No-Build Alternative" to the ISFSI in Chapter 8. ER at 8.1-2 to 4. The Applicant discusses the impacts of not building the ISFSI, including, for example, a need to shut down reactors earlier than planned or forego license renewal, causing utilities to buy replacement power or replacement generating capacity, which would in turn increase air pollution as more fossil fuels were burned. Id. at 8.1-2 to 3. If the PFS ISFSI were not built, reactor licensees might build more onsite ISFSIs and incur more environmental impacts at their sites. Id. at 8.1-3. Moreover, the resulting diversification of technology and decentralization of storage locations would increase the cost of interim fuel storage. Id. Not building the PFS ISFSI would also delay the decommissioning of some reactor sites that await the removal of the spent fuel stored there. Id. Such delay would increase costs further, including the cost of low-level waste disposal. Id. Thus the Applicant's analysis

concluded that not building the PFS ISFSI was an unattractive option. Id. at 8.1-4. Because OGD ignores this analysis, this subcontention must be dismissed.

This subcontention must also be dismissed because it fails to show that a genuine dispute exists with the Applicant on a material issue of law or fact. 10 C.F.R. § 2.714(b)(2)(iii). OGD fails to provide any credible "factual evidence or supporting documents that produce some doubt about the adequacy of a specified portion of the Applicant's documents or that provides supporting reasons that tend to show that there is some specified omission from the Applicant's documents." Florida Power and Light Company (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-90-16, 31 NRC 509, 521 n.12 (1990). Furthermore, if a petitioner believes that an application does not address a relevant matter, it must explain why the application is deficient. 54 Fed. Reg. 33,168, 33,170 (1989) (10 C.F.R. § 2.714, Statement of Considerations). Here, OGD provides no basis besides a conclusory allegation in a document of unknown credibility that the no-build alternative is preferable to any offsite ISFSI option. See OGD Petition at 30. Such an allegation does not speak to the Applicant's analysis at all and it does not provide any reasons why any specific part of the application is wrong or any specific material should have been included; a petitioner must present a "reasoned statement" of why the application is unacceptable to have a contention admitted. See Turkey Point, LBP-90-16, 31 NRC at 521 & n.12. Here, OGD has not provided such a statement; thus this subcontention must be dismissed.

Finally, this subcontention must be dismissed for having insufficient factual basis. 10 C.F.R. § 2.714(b)(2)(ii). The only item OGD cites to support its contention is a short,

conclusory allegation that storing spent fuel at reactor sites is safer than storing it offsite. OGD Petition at 30. The document provides no reasons to support its conclusion and the expertise of the author of the statement is completely unknown. See id. Furthermore, and significantly here, under NEPA as interpreted by the Commission, applicants need not perform a cost-benefit analysis at all if they can identify no environmentally superior alternatives to their proposal. Consumers Power Company (Midland Plant, Units 1 and 2), ALAB-458, 7 NRC 155, 162-63 (1978). OGD presents no arguments that the no-build alternative is environmentally superior to the Applicant's ISFSI proposal. See OGD Petition at 30. Thus OGD provides insufficient factual basis to support its contention that the Applicant's analysis is incorrect and this subcontention must be dismissed.

d) Analysis of Alternative Fuel Storage Locations in the U.S. and Abroad

OGD asserts that the Applicant has not shown the need for additional spent fuel storage capacity in the United States and that therefore the Applicant "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." OGD Petition at 30-31.

OGD asserts, without providing any supporting factual or legal basis (see 10 C.F.R § 2.714(b)(2)(ii)), that the Applicant must provide in its statement of need for the facility, an analysis for each reactor site "in the U.S. and abroad." OGD Petition at 31. As discussed in Applicant's Response to Utah Contention X, supra, NEPA employs a rule of reason and both the NRC and CEQ regulations only call for an applicant to "briefly"

specify the underlying purpose and need for the proposed action. 10 C.F.R. Part 51, App. A § 4; 40 C.F.R. § 1502.13.

Like the State, OGD has come forward with no facts to suggest under NEPA's rule of reason that this brief description of need envisioned by the applicable regulatory authorities must be expanded into its proposed worldwide reactor analysis. Absent some supporting basis -- which is absent from OGD's contention -- one can only conclude that OGD, like the State, seeks to stymie this project by never-ending analysis. Therefore, this subcontention must be dismissed for lack of basis. 10 C.F.R. § 2.714(b)(2)(ii). Further, it should be dismissed for advocating stricter requirements than those imposed by the regulations, and therefore amounting to an impermissible collateral attack on the Commission's rules. See Section II.B supra.

This subcontention must be dismissed as well for failing to show that a genuine dispute exists with the applicant on a material issue of law or fact. 10 C.F.R. § 2.714(b)(2)(iii). OGD asserts that the need for the Applicant's ISFSI is not as urgent as the Applicant describes it to be because the need is allegedly driven by electric utilities desire to maintain the ability to transfer all the fuel in their reactors into their spent fuel pools in order to reduce refueling outage time and thus save money. OGD Petition at 30 (quoting Auke Piersma, The Real Costs of On-Site Storage of Highly Irradiated Nuclear Fuel). But the very study cited by OGD, and even the portion quoted by OGD, shows that there is no basis to OGD's contention. OGD cites the Piersma document for the proposition that "only 9 reactors will require irradiated nuclear pool expansion or dry cask storage before 2000." In other words, Piersma and OGD concede that nine reactors

will run out of spent fuel storage by 2000. Piersma and OGD also are silent on the situation after 2000, ignoring the fact that Applicant's proposed ISFSI is not scheduled to begin operation until 2002. LA, at 1-8. See also ER at 1.3-2.

Finally, this subcontention must be dismissed because OGD bases its criticism of the Applicant's need assessment on the premise that reducing refueling outage time and thus saving money does not constitute "need."

e) Disproportionate Impacts

OGD claims that there are a host of hazardous facilities within a 35-mile radius of the Skull Valley reservation and that the Environmental Report fails to evaluate "disproportionate impacts that may be suffered by the members of the Goshute Tribe who live in the area or OGD members" who may be affected by the proposed ISFSI. OGD Petition at 34. This subcontention must be dismissed for a lack of legal basis for consideration of solely "disparate or disproportionate" impacts under NEPA, for the reasons set forth in subpart a above.

Further, the contention must be dismissed for a lack of factual basis as required by 10 C.F.R. § 2.714(b). OGD has referred to and incorporated various documents concerning various hazardous facilities located within its self-proclaimed 35-mile radius. However, the mere citation of an alleged factual basis for a contention is not sufficient by itself. Rather, a petitioner is obligated to provide the technical analyses and expert opinion or other information showing why its bases support its contention. See Section

II.C supra. Where a petitioner has failed to do so, "the Board may not make factual inferences on [the] petitioner's behalf." Id.

OGD has failed to provide "analyses and expert opinion showing why its [asserted] factual bases" support its contention. It has merely provided a list of permits and related documents from various hazardous facilities from within its self-proscribed 35-mile limit with no analysis that would support a contention that the cumulative presence of the ISFSI together with these other facilities presents a disproportionately high and adverse impact on the health or environment of persons living on or close to the Skull Valley reservation.

Specifically, OGD fails to provide credible scenarios in Contention O -- or any of its other contentions -- for an accident whereby the proposed ISFSI would have an adverse impact on the surrounding population. Nor by the same token has OGD provided any factual basis for a scenario that would result in the release of hazardous materials from one of these other facilities. Nor has OGD explained how a release of hazardous materials from one of these other facilities would travel to the Skull Valley Reservation, or provided any basis to conclude that any materials that may reach the reservation area would have a significant adverse consequence.

Indeed, OGD's own Exhibit 21 reflects that the Clive Incineration Facility (to which OGD refers in its Petition as emitting numerous hazardous emissions into the surrounding area) has as a practical matter no impact whatsoever on the Reservation. The incinerator is located approximately 37 miles northwest of Grantsville in Tooele County,

which would place it about 40 miles north northwest from the Skull Valley Reservation. See OGD Exhibit 21 at 8; LA at Figure 1-1. Using "conservative, worst-case exposure from stack emissions," the risk assessment which OGD cites concluded that the "excess life time cancer risk associated with exposure to emissions" from the incineration for individuals living ten miles from the incinerator are "de minimus." OGD Exhibit 21 at 2-3 (emphasis added).

Further, OGD ignores the evaluation of potential cumulative impacts in the Environmental Report and the SAR. The Environmental Report addresses the cumulative environmental impact of the ISFSI and other sources where they are relevant. See, e.g., ER §§ 4.1.3, 4.2.3, 4.1.7, 4.2.7. Moreover, the Applicant has considered the potential impact of other facilities in Tooele County on the ISFSI and has found that it is unlikely that they would have any. See SAR § 2.2. For example, the Applicant has considered the effects of operations at the Tekoi Rocket Engine Test Facility, Dugway Proving Ground, and Tooele Army Depot, the industrial, transportation, or military facilities closest to the site, and has found that they would pose no threat to the ISFSI because of the distance to them and the presence of intervening terrain. See SAR at 2.2-1 to 4. OGD provides absolutely no factual basis to support a challenge to these determinations made in the SAR.

OGD has not met the standards set by NRC precedent on the admissibility of contentions alleging cumulative environmental effects. The petitioner must specify the effects and must come forward with specific facts and reasons to show that such effects will occur. See Duquesne Light Company (Beaver Valley Power Station, Unit 2), LBP-

84-6, 19 NRC 393, 425 (1984). In particular, it must come forward with specific information regarding the incremental effects of the proposed action and it must show why the applicant's analysis of the pre-existing effects with which the effects of the proposed action will supposedly be cumulative is wrong. Georgia Power Company (Vogtle Nuclear Plant, Units 1 and 2), LBP-84-35, 20 NRC 887, 914 (1984); Toledo Edison Company (Davis-Besse Nuclear Power Station, Unit 1), LBP-87-11, 25 NRC 287, 293 (1987); Rancho Seco, supra 38 NRC at 247 (petitioners must also come forward with data regarding pre-existing effects). OGD has not met this burden.

In short, OGD has supplied neither a legal or factual basis for its claims of disproportionate impact, and this subcontention must be dismissed.

f) The Impact of the ISFSI on Local Property Values

OGD claims that

> [t]he ER fails to address the effect that the facility will have on 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.

OGD Petition at 34-35.

This subcontention must be dismissed because it lacks sufficient factual basis. 10 C.F.R. § 2.714(b)(2)(ii). OGD provides insufficient bases in the form of alleged facts, expert opinion, or documents to support its allegation that the Applicant's proposed ISFSI will have any impact on its members' property values. See OGD Petition at 34.

OGD cites Kelley v. Selin, 42 F.3d 1501, 1509 (6th Cir. 1995), and City of Santa Fe v. Komis, 845 P.2d 753 (N.M. 1992), to support its claim that the siting of the Applicant's ISFSI will harm OGD members' property values. OGD Supp. Petition at 34. These cases, however, do not support the point for which they are urged and thus this subcontention must be dismissed. Vermont Yankee Power Corporation (Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29, 48 (1989), vacated in part on other grounds and remanded, CLI-90-4, 31 NRC 333 (1990).

The court in Kelley did not hold that the storage of spent fuel at an ISFSI at the nearby Palisades nuclear reactor would have any impact on the petitioners' nearby property values. See Kelley, 42 F.3d at 1509-10. The court merely acknowledged that the petitioners had "alleged sufficient injury to establish standing," where the injuries alleged included "harm to [the petitioners'] aesthetic interests and their physical health" as well as "that the value of his or her property will be diminished." Id. at 1509. That holding is irrelevant here. First, a petitioner's burden of coming forward with factual bases to support a contention in an NRC licensing hearing is significantly higher than the "notice pleading" standard a party must meet to gain admission into Federal court. Yankee Atomic Electric Company (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 248 & n.7 (1996). While the petitioners' assertions of harm to their property values in Kelley may have been sufficient to satisfy the "threatened injury" test necessary (along with the "zone of interest" test) to provide them with standing (see Kelley, 42 F.3d at 1508), their assertions, without more, do not rise to the factual standard required to warrant admission of a contention in an NRC licensing hearing. Yankee Atomic, CLI-

96-7, 43 NRC at 248 n.7. Second, in addition to asserting that the storage of the spent fuel would harm their property values, the petitioners in Kelley also alleged that it would harm their "aesthetic interests and their physical health" and both of those alleged injuries, independently, would be sufficient to satisfy the "threatened injury" test. See Kelley, 42 F.3d at 1509-10. Thus Kelley does not provide OGD with a factual basis to warrant the admission of this subcontention and it must be dismissed.

Similarly, while the court in Komis did find that the future transportation of nuclear waste would have an impact on the respondents' property value, that finding was based on the public's (i.e., potential buyers') fear of waste. See Komis, 845 P.2d at 755-56. As the Applicant demonstrates below, fear and its effects are not cognizable under the Atomic Energy Act ("AEA") or NEPA, the statutes under which the NRC holds licensing hearings. See infra. The court's holding in Komis was based on its interpretation of a New Mexico statute (845 P.2d at 755 n.1), so it is not relevant to this hearing and does not provide a basis for OGD's assertion. Thus this subcontention must be dismissed.

As mentioned above, this subcontention must also be dismissed because psychological effects are outside the zones of interest protected by the AEA and NEPA, the statutes under which the NRC holds licensing hearings. Metropolitan Edison Company (Three Mile Island Nuclear Station, Unit No. 1), CLI-82-6, 15 NRC 407, 408 (1982) (AEA); Metropolitan Edison Co. v. People Against Nuclear Energy, 460 U.S. 766, 772 (1983) (NEPA). Purely economic effects are also outside the zones of interest of the AEA and NEPA and may not give rise to admissible contentions. See e.g., Sacramento

Municipal Utility District (Rancho Seco Nuclear Generating Station), CLI-92-2, 35 NRC 47, 56 (1992). NEPA does not encompass adverse health effects resulting from the fear of the risk of an accident at a nuclear power plant. Metropolitan Edison, 460 U.S. at 775. And it does not encompass effects on property values arising solely out of the fear of the presence of a nuclear power plant, Houston Lighting and Power Company (Allens Creek Nuclear Generating Station, Unit 1), ALAB-582, 11 NRC 239, 242 (1980), or the fear of radiological contamination potentially caused by a nuclear power plant, Philadelphia Electric Company (Limerick Generating Station, Units 1 and 2), LBP-82-43A, 15 NRC 1423, 1448-49 (1982). To be cognizable under NEPA, there must be "a reasonably close causal relationship between a change in the physical environment and the effect at issue." Metropolitan Edison, 460 U.S. at 774 (emphasis added).

While OGD presents affidavits to support its claim that its members fear the siting of the ISFSI and the transportation of spent fuel (see OGD Exhibits 16-19), it supplies no factual basis whatsoever to show that the ISFSI or the transportation of spent fuel will harm the physical environment. See id.; OGD Petition at 34. Therefore, OGD shows no injury to its members' property values that is cognizable under either NEPA or the AEA. Moreover, whether the OGD members' fear is unreasonable or reasonable (see OGD Petition at 34) is irrelevant; fear and its effects on property values do not give rise to litigable contentions. Therefore, because the only source of injury for which OGD provides a factual basis is not cognizable under either the AEA or NEPA, this subcontention must be dismissed.

P. OGD Contention P: Members of OGD Will Be Adversely Impacted by Routine Operations of the Proposed Storage Facility and Its Associated Transportation Activities.

1. The Contention:

OGD alleges in Contention P that:

> 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.

OGD Petition at 36. The asserted basis for the contention states that 10 C.F.R. § 72.32(a)(5) requires that the Application contain a brief description of the means of mitigating the consequences of each type of accident, and that the 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" and make "their ancestral

homelands unlivable." OGD Petition at 35-36.[106] In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated incorporating the specific allegations in its bases as indicated below:

> The ability of OGD members to pursue the traditional Goshute life style will be adversely impacted by the routine operations at the storage facility, specifically:
>
> a) The storage facility will have a visual impact.
>
> b) The facility will have other impacts, including noise, the intrusion of vehicular and personnel traffic into the site area, and the presence of strangers.
>
> c) The License Application has not addressed the concerns of OGD members regarding the impact of living in fear of the wastes stored at the ISFSI and in fear of an accident at the site that could expose the members and their families.

2. Applicant's Response to the Contention

OGD raises a number of issues under Contention P, which we address in turn below.

a) Visual Impact

OGD claims that "[t]he ability of OGD members to pursue the traditional Goshute life style will be adversely impacted by the routine operations at the storage facility." OGD Petition at 36. "Obvious impacts resulting from the physical presence of the facility [include:] visual intrusion." Id.

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[106] The basis also states that OGD incorporates by reference the discussions of "accidents and the mitigation of those accidents" found in its Contentions A and C. OGD Petition at 37. The Applicant's responses to the "accidents and the mitigation of those accidents" discussed in OGD's Contentions A and C are fully addressed in its responses to those contentions.

This subcontention must also be dismissed because it ignores relevant material submitted by the Applicant. See, Section II.C.2, pp. 15-16, supra. The Environmental Report addresses the visual impact of the ISFSI, including its impact on the use and enjoyment of the surrounding area, regional parks, and wilderness areas. ER at 2.7-10, 2.9-3 to 2.9-4, 4.1-19, 4.2-7 to 4.2-9. The ISFSI was specifically designed to minimize its visual impact (its features are typical of other human settlements in Skull Valley); it is also remote (e.g., most OGD members live more than two miles from the site, OGD Exhibits 16, 17, 18, and 19) and partly obscured from view by the surrounding terrain (e.g., Hickman Knolls screens the site from view from the south). Id. at 4.2-7 to 4.2-8. Because OGD has ignored this material, this subcontention must be dismissed.

Moreover, this subcontention must be dismissed because it does not include "sufficient information . . . to show that a genuine dispute exists with the applicant on a material issue of law or fact." 10 C.F.R. § 2.714(b)(2)(iii). It does not provide the "supporting reasons for the petitioner's belief" that the application is inadequate. Id. While the fact that the ISFSI will be visible is obvious, OGD presents no facts, expert opinion, or documentation to indicate the relative visual impact of the facility, the nature of the impact, or the facility's impact in relation to its surroundings. OGD Petition at 35-36. Even the affidavits OGD cites in support of other subcontentions do not provide a basis for OGD's allegation. See OGD Exhibits 16, 17, 18, and 19.

> Our memorandum defines the failure to demonstrate a genuine issue of fact as a failure to provide any factual evidence or supporting documents that produce some doubt about the adequacy of a specified portion of [the] Applicant's documents or that provides supporting reasons

> that tend to show that there is some specified omission from [the] Applicant's documents.

Florida Power and Light Company (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-90-16, 31 NRC 509, 521 n.12 (1990). Because OGD has failed to provide any factual evidence or supporting reasons that tend to cast doubt on a specified portion of the application, this subcontention must be dismissed.

b) Noise and Intrusion of Vehicular and Personnel Traffic

OGD also claims that the ability of OGD members to pursue the traditional Goshute lifestyle will be adversely impacted by "noise, worker and visitor traffic to and from the storage site, and presence of strangers in the community" and the routine transportation operations of spent nuclear fuel, including the presence of heavy haul fuel transportation trucks. OGD Petition at 36.

This subcontention like (a) must be dismissed because it ignores relevant material submitted by the Applicant. The Environmental Report addresses the impact of the construction and the operation of the ISFSI with respect to personnel traffic, vehicular traffic, and noise. See ER §§ 4.1.6, 4.1.7, 4.2.6, 4.2.7. The Environmental Report states that during the initial construction phase, 130 workers will be required on site, during later phases 43 workers will be required, and during operation, 42 staff members will be present. Id. at 4.1-11, 4.2-5. The construction work force and operating staff are expected to be drawn from the Tooele County and Salt Lake City areas, so personnel will commute to the site and there will be no influx of families with school-age children and

no impact on housing, schools, or the availability of other government services. Id. at 4.1-11, 4.2-5 to 6.

Regarding vehicular traffic and noise, the Environmental Report analyzes the number of truck trips per day that will be taken to and from the ISFSI, including trips taken by heavy haul trucks transporting spent fuel casks. Id. at 4.1-13 to 14, 4.1-16 to 17, 4.2.6, 4.7-7.[107] It also projects the number of personal vehicle trips that the construction workers and staff will make to the site. Id. at 4.1-14, 4.1-16 to 17, 4.2-6. The Environmental Report then analyzes the vehicular traffic and projects the congestive effect on local roads. Id. at 4.1-14 to 17, 4.2-6. It analyzes the noise impact of the traffic in terms of decibels and compares it to Federal Highway Administration and EPA standards. Id. at 4.1-15 to 18, 4.2-6. Because OGD has ignored this material, this subcontention must be dismissed.

This subcontention must also be dismissed because it does not include sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. 10 C.F.R. § 2.714(b)(2)(iii). It does not provide supporting reasons for OGD's belief that the application is inadequate. Id. OGD presents no facts, expert opinion, or documentation regarding the intrusion of personnel into the ISFSI site area, vehicular traffic, or noise, or the Applicant's analysis thereof. OGD Petition at 35-36. Because OGD has failed to provide any factual evidence or supporting documents that

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[107] The number of heavy haul fuel transportation truck trips to and from the ISFSI (fewer than one per day, on average) will be quite small compared to the number of ordinary construction-related truck trips (a minimum of 20 per day, on average, over the first 10 years of operation of the facility). Compare ER at 4.1-17 with ER at 4.7-7.

produce some doubt about the adequacy of a specified portion of the application or that provide supporting reasons that tend to show that there is some specified omission from the application, OGD has failed to show that at material dispute exists with the Applicant and this subcontention must be dismissed. Turkey Point, LBP-90-16, 31 NRC at 521 n.12.

c) Fear of Waste and Accidents

OGD alleges that the License Application has not addressed the concerns of OGD members regarding the impact of living in fear of the wastes stored at the ISFSI and fear of an accident at the site (or acts of sabotage or terrorism) that could expose the members and their families. OGD Petition at 36. According to OGD, the Applicant has not addressed the "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." Id. The Applicant has also allegedly "failed 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." Id. OGD asserts that 10 C.F.R. § 72.32(a)(5) requires the application to include a brief description of the means of mitigating the consequences of each type of accident. Id. (citing 10 C.F.R. § 72.32(a)(5)).

This subcontention must be dismissed because psychological effects are outside the zone of interest protected by the Atomic Energy Act (AEA) and NEPA, the statutes under which the NRC holds licensing hearings. See Response to OGD Contention O,

subpart (f). Fear and its effects on the mental or physical well-being of individuals (see OGD Petition at 36-37) do not give rise to litigable contentions and thus this subcontention must be dismissed.

Furthermore, this subcontention must be dismissed as an impermissible collateral attack on the Commission's regulations for advocating stricter requirements than they impose. Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), LBP-82-106, 16 NRC 1649, 1656 (1982). 10 C.F.R. § 72.32(a)(5) does not require the Applicant to mitigate the effects of the fear of accidents. 10 C.F.R. § 72.32(a) states that an applicant's Emergency Plan must include the following information:

> (5) *Mitigation of Consequences*. A brief description of the means of mitigating the consequences of each type of accident, including those provided to protect workers onsite, and a description of the program for maintaining the equipment.

10 C.F.R. § 72.32(a)(5). Thus the regulation speaks to the mitigation of the consequences of accidents, not the fear or apprehension thereof. Moreover, because of the low risk posed to the public, emergency plans for ISFSI's that do not handle or repackage spent fuel are not required to have offsite components. 60 Fed. Reg. 32,430, 32,436, 32,442 (1995) (10 C.F.R. § 72.32, Statement of Considerations); Northern States Power Company (Independent Fuel Storage Installation) Director's Decision under 10 C.F.R. § 2.206 (DD-97-24), 62 Fed. Reg. 51,916, 51,917 (1997); see supra Applicant's Response to OGD Contention B. Therefore, such emergency plans need not address even postulated physical accident consequences to people offsite, let alone the psychological

effects on them stemming from their fear of accidents. Thus, for advocating stricter requirements than the NRC's regulations impose, this subcontention must be dismissed.

VII. CONFEDERATED TRIBES CONTENTIONS

A. Confederated Tribes Contention A: Decommissioning Plan Deficiencies

Confederated Tribes has filed 8 contentions[108] to which the Applicant responds as set forth below.

1. The Contention

The Confederated Tribes allege in Contention A that:

> PFS has not provided reasonable assurance that the ISFSI can be cleaned up and adequately restored upon cessation of operations.

Confederated Tribes Petition at 2. The asserted bases for the contention are set forth in two pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows, incorporating the specific allegations in its bases as indicated below.

> PFS has not provided reasonable assurance that the ISFSI can be cleaned up and adequately restored upon cessation of operations in that:
>
> a) The Applicant's cost analysis is inadequate in that it does not take into account: i) the lack of available sites for disposing of mixed wastes, ii) the consideration offered to the Skull Valley Band for permission to locate the ISFSI on their Reservation, and iii) the cost

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[108] See Statement of Contentions on Behalf of the Confederated Tribes of the Goshute Reservation and David Pete (hereinafter "Confederated Tribes Petition") dated November 23, 1997.

of the disposal of radioactive materials upon decommissioning.

b) The license application should be rejected because it does not provide a reasonable assurance that PFS knows how the stored radioactive materials will ultimately be disposed of or how much such disposal will cost.

c) No specific information has been provided to define the amount of funds required to be allocated to insure the adequate and timely handling of the eventual decommissioning of the ISFSI. See 10 C.F.R. §§ 72.25, 72.30(a), (b).

d) PFS's description of the decommissioning process is not adequate in that it does not provide full details of the decommissioning and dismantlement of the ISFSI, including whether buildings that may have been radioactively contaminated will be left standing.

2. Applicant's Response to the Contention

The Confederated Tribes raise a number of issues under Contention A, which we address in turn below. At the outset, we draw the Board's attention to the pleading requirements for contentions concerning decommissioning and decommissioning funding that have been laid down in NRC case law. See, e.g., Yankee Atomic Electric Company (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1 (1996) [hereinafter Yankee Atomic I]; Yankee Atomic Electric Company (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61 (1996) [hereinafter Yankee Atomic II]; Yankee Atomic Electric Company (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235 (1996) [hereinafter Yankee Atomic III]. These standards, which have been set out in full detail in Applicant's Response to Utah Contention S, apply to all of the Confederated Tribes' decommissioning subcontentions.

a) Cost Analysis Factors

The Confederated Tribes allege that the Applicant has failed to consider a number of factors relevant to the cost of decommissioning of the ISFSI. Confederated Tribes Petition at 2. The factors are: i) the lack of available sites for disposing of mixed wastes, ii) the consideration offered to the Skull Valley Band for permission to locate the ISFSI on their Reservation, and iii) the cost of the disposal of radioactive materials upon decommissioning. Id.

At the outset, this subcontention must be dismissed because it fails to provide "references to those specific sources and documents . . . on which the petitioner intends to rely to establish [the] facts or expert opinion" on which it bases its contention. 10 C.F.R. § 2.714(b)(2)(ii). The Confederated Tribes refer to no sources or documents to support their claim that the allegedly omitted cost factors are relevant or significant to the ultimate cost of the decommissioning of the Applicant's ISFSI. Confederated Tribes Petition at 2. While the Confederated Tribes cite a Defense Department document alleging that there are no sites available for the disposal of mixed wastes, they provide no basis for concluding that decommissioning of the proposed ISFSI would involve mixed wastes, nor do they indicate at all how unavailability of mixed waste sites would be relevant or even significant to the cost of decommissioning the ISFSI. Id. In fact, the Decommissioning Plan states that the Applicant only anticipates the generation of low-level costs at decommissioning from the cleanup of small amounts of residual contamination and the potential dispersal of contaminated storage casks. LA App. B at 2-3 to 4. Similarly, Confederated Tribes have set forth no basis why the consideration

offered to the Skull Valley Band for locating the ISFSI on their reservation is relevant to the decommissioning of the site. The Confederated Tribes have completely failed to set forth a factual basis for this subcontention as required by C.F.R. § 2.714(b)(2)(ii). Therefore, this subcontention must be dismissed.

Next, this subcontention must be dismissed because contentions regarding the accuracy or completeness of a decommissioning plan (or decommissioning funding plan) are admissible only if the contention also shows that the alleged deficiency in the plan "has some independent health and safety significance." Yankee Atomic III, CLI-96-7, 43 NRC at 256. The Confederated Tribes claim no health or safety significance for the alleged omission of the cost factors or the Applicant's total cost estimate. See Confederated Tribes Petition at 2. Petitioners must show "some specific tangible link between the alleged errors in the [decommissioning] plan and the health and safety impacts they invoke." Yankee Atomic III, CLI-96-7, 43 NRC at 258. Here, the Confederated Tribes invoked no health or safety impacts at all, so the subcontention must be dismissed. Nor may the Board infer such a significance from the petitioners' language. Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 304 (1995). A petitioner is obligated "to provide the [technical] analyses and expert opinion" or other information "showing why its bases support its contention." Georgia Tech, LBP-95-6, 41 NRC at 304. Where a petitioner has failed to do so, "the Board may not make factual inferences on [the] petitioner's behalf." Id. Therefore, the Board must rely on what the petitioners actually say in their

contention and must not infer omitted support or meaning from its language or its tone. See Section II.C supra.

Furthermore, this subcontention must be dismissed because challenges to the reasonableness of an applicant's decommissioning cost estimates are not admissible unless the petitioners show that "there is no reasonable assurance that the amount will be paid." Yankee Atomic I, CLI-96-1, 43 NRC at 9. Without such a showing the only relief available would be "the formalistic redraft of the plan with a new estimate." Yankee Atomic I, CLI-96-1, 43 NRC at 9. Such relief is not sufficient to warrant consideration of a contention because petitioners' are not entitled to it. Petitioners are only entitled to relief from the injury they rely upon to afford them standing in a hearing, id. at 6, and because a mere redrafting of a financial plan would have no effect on the physical events taking place at a facility (i.e., the potential health and safety threats that provide petitioners with standings), petitioners are not entitled to such relief. See id. at 6, 9. The Confederated Tribes make no assertions that the Applicant will be unable to pay its decommissioning costs; they merely allege that the cost estimates should be "more realistic." Confederated Tribes Petition at 2. Therefore, they are not entitled to the relief they seek and the subcontention must be dismissed.

Furthermore, without some indication that an alleged flaw in a funding plan will result in an actual shortfall of funds needed for decommissioning, this contention does not satisfy the materiality requirement of 10 C.F.R. § 2.714. Yankee Atomic III, CLI-96-7, 43 NRC at 259. The legal standard is reasonable assurance of funds, not "ironclad" assurance. Id. at 260. Short of an allegation of a "gross discrepancy" in the

decommissioning cost estimate, supported by the necessary factual basis, a charge alleging the inadequacy of the estimate or the funding plan will not be admitted. Id. The Confederated Tribes do not indicate that the alleged omission of decommissioning cost factors will result an actual shortfall of funds or a "gross discrepancy" in the Applicant's cost estimate. See Confederated Tribes Petition at 2. Therefore, this subcontention is also not material and must be dismissed.

b) Disposal of Radioactive Materials

The Confederated Tribes allege that the application should be rejected because the Applicant does not provide reasonable assurance (in the form of a specific plan) that it knows how the stored radioactive materials will be disposed of or how much such disposal will cost. Confederated Tribes Petition at 2-3.

The part of this subcontention that claims a lack of reasonable assurance that the wastes can be disposed of must be dismissed because it seeks to litigate a generic determination made by the NRC. Pacific Gas and Electric Company (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-93-1, 37 NRC 5, 30 (1993). The NRC has determined that

> there is reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century, and sufficient repository capacity will be available within 30 years beyond the licensed life for operation of any reactor to dispose of the . . . spent fuel originating in such reactor and generated up to that time.

10 C.F.R. § 51.23(a) (emphasis added). Therefore, the Applicant may indeed rely on the availability of a Federal fuel spent repository at the end of the license term of the ISFSI as a place to dispose of its spent fuel and need not provide other assurance that such a site will exist. As an attack on the NRC's determination, this subcontention is "barred as a matter of law." Diablo Canyon, LBP-93-1, 37 NRC at 30.

Moreover, this part of the subcontention should also be dismissed because it does not show that the alleged deficiency in the Applicant's decommissioning plan "has some independent health and safety significance." Yankee Atomic III, CLI-96-7, 43 NRC at 256. In Yankee Atomic II, the Board specifically determined that uncertainty regarding DOE's establishment of a mined geologic repository for spent fuel does not have the independent health and safety significance required to support a decommissioning contention. Yankee Atomic II, LBP-96-2, 43 NRC at 77 n.12, 78. (citing 10 C.F.R. § 51.23(a)). Therefore, this subcontention also must be dismissed.

Finally, the part of the subcontention that asserts that the Applicant must provide a cost estimate for the ultimate disposal of the spent fuel at the ISFSI must be dismissed as being beyond the scope of this proceeding. See supra Section III. Congress has provided a statutory means by which nuclear utilities will pay for DOE's ultimate disposal of the spent nuclear fuel generated at nuclear power plants. Indiana Michigan Power Company v. DOE, 88 F.3d 1272, 1273 (D.C. Cir. 1996). Under the Nuclear Waste Policy Act of 1982, utilities pay the Secretary of Energy statutorily imposed fees, in return for which DOE will construct a repository for the fuel. Id. (citing 42 U.S.C. §§ 10222(a)(5)(B), 10131(a)(5) (1994)). The statute requires utilities to enter into standard

contracts with DOE under which, in return for the fees, DOE will dispose of the fuel. Id.; see 10 C.F.R. § 961.11 (DOE standard contract). Therefore, because the issue of the cost of the ultimate disposal of spent fuel has been addressed statutorily, the issue is outside the scope of this hearing. See, e.g., Philadelphia Electric Company (Peach Bottom Atomic Power Station, Units 2 and 3, ALAB 216, 8 A.E.C. 13, 20 (1974)(it is well established that "a licensing proceeding . . . is plainly not the proper forum for an attack on applicable statutory requirements or for challenges to the basic structure of the Commission's regulatory process"). See also Section II.B. supra.

c) Decommissioning Cost Estimate

The Confederated Tribes claim that the Applicant "should be required to more adequately explain the derivation of its anticipated [decommissioning] costs to demonstrate that its estimates are rational and accurate." Confederated Tribes Petition at 3.

First, this subcontention should be dismissed because it lacks sufficient factual basis. 10 C.F.R. § 2.714(b)(2)(ii). While the Confederated Tribes assert that the Applicant has left out "specific information . . . to define the amount of funds required" for decommissioning, it does not specify any details or information that the Applicant has omitted. Confederated Tribes Petition at 3. Thus the subcontention lacks facts or expert opinion to support it and lacks references to specific sources and documents to establish said facts or opinion. 10 C.F.R. § 2.714(b)(2)(ii). Therefore it must be dismissed.

Second, this subcontention must be dismissed because it challenges the reasonableness of the Applicant's decommissioning cost estimates without showing that "there is no reasonable assurance that the amount will be paid." Yankee Atomic I, CLI-96-1, 43 NRC at 9. Without such a showing the only relief available to the Confederated Tribes would be "the formalistic redraft of the plan with a new estimate," and the Confederated Tribes are not entitled to such relief. Id. at 6, 9. The Confederated Tribes make no argument at all that the Applicant will be unable to pay its decommissioning costs. See Confederated Tribes Petition at 3. Thus this contention must be dismissed.

Furthermore, without any indication that the alleged flaws in the Applicant's funding plan will result in an actual shortfall of funds needed for decommissioning, this subcontention does not satisfy the materiality requirement of 2.714. Yankee Atomic III, CLI-96-7, 43 NRC at 259. The Confederated Tribes' assertions that the Applicant's information is inadequate say nothing about a funding shortfall. See Confederated Tribes Petition at 3. Thus this subcontention must be dismissed.

Finally, this subcontention must be dismissed as lacking "sufficient information . . . to show that a genuine dispute exists with the [A]pplicant on a material issue of law or fact." 10 C.F.R. § 2.714(b)(2)(iii). The Confederated Tribes claim that the Applicant "should be required to more adequately explain the derivation of its anticipated costs," yet they provide no information or point of law whatsoever to support their assertion that the Applicant's explanation or derivation of its anticipated costs are inadequate and thus no showing that a genuine dispute exists on a material issue. See Confederated Tribes Petition at 3. Thus this subcontention must be dismissed.

d) Decommissioning Process

The Confederated Tribes claim that the Applicant's description of the decommissioning process is inadequate and that the application should be amended "to include full details of decommissioning and dismantlement of the ISFSI." Confederated Tribes Petition at 3. The application should also indicate "whether PFS intends to leave buildings standing that may have been radioactively contaminated." Id.

First, this subcontention must be dismissed as an impermissible attack on the Commission's regulations. There is no requirement that the "full details of decommissioning and dismantlement of the ISFSI" be included in the preliminary decommissioning plan under 10 C.F.R. § 72.30(a). Such detail is not required until filing of the final decommissioning plan under 10 C.F.R. § 72.54(g). Thus the contention "advocates stricter requirements than those imposed by regulation" and must be rejected.

Moreover, this subcontention must be dismissed because even contentions regarding the accuracy or completeness of a decommissioning plan that do have health and safety significance must allege more than mere uncertainty. Yankee Atomic I, CLI-96-1, 43 NRC at 8. It is unreasonable to require as much precision of an applicant's proposed decommissioning procedures at the time of licensing as will be required of its final procedures at the time of decommissioning. Id.; see 10 C.F.R. § 72.54(g) (requirements for *final* decommissioning plan). Significant uncertainties today regarding the decommissioning of a facility 30 or more years into the future are inevitable. Yankee Atomic I, CLI-96-1, 43 NRC at 8. Therefore, because the Confederated Tribes merely allege that the application is inadequate because of uncertainties regarding the exact

procedures the Applicant will use to decommission the facility, see Confederated Tribes Petition at 3, this subcontention must be dismissed.

Finally, this subcontention must be dismissed because it ignores relevant material submitted by the Applicant. See Section II, C, pp. 15-16, supra. In contending that the application should be amended to include "whether PFS intends to leave buildings standing that may have been radioactively contaminated," Confederated Tribes Petition at 3, the Confederated Tribes ignore directly relevant material in the License Application. See LA Appendix B at 1-1, 2-1, 2-4. The Decommissioning Plan states that: "The objective of decommissioning activities for the PFSF is to remove all radioactive materials having activities above the applicable NRC release limits in order that the site may be released for *unrestricted use*." Id. at 2-1. "A final radiation survey will be conducted to assure that all radioactive materials have been removed from the site." Id. at 2-4. 10 C.F.R. Part 20, Subpart D spells out the maximum allowable radiation dose rate limits for members of the public from licensee operations and thereby controls the maximum residual contamination allowable at the ISFSI site. 10 C.F.R. §§ 20.1301-1302. Therefore, because this subcontention ignores relevant material in the License Application, it must be dismissed. Moreover, to the extent the Confederated Tribes seeks to impose stricter standards than that required by 10 C.F.R. Part 20, Subpart D, the contention must also be dismissed as an impermissible challenge to agency regulations.

B. Confederated Tribes Contention B: Lack of protection against worst case accidents

1. The Contention

Confederated Tribes allege in Contention B that:

> PFS has violated both NRC regulations and NEPA requirements by not adequately dealing with certain reasonably foreseeable accidents and failing to fully evaluate their potential impacts on health and the environment, to protect against them in an adequate manner, or to provide adequate emergency response measures.

Confederated Tribes Petition at 3. The asserted bases for the contention are set forth on pages 3 and 4 of the Petition. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention, incorporating the asserted 10 C.F.R. § 72.32 regulation, be restated as follows:

> PFS has violated both NRC regulations and NEPA requirements by not adequately dealing with certain reasonably foreseeable accidents and failing to fully evaluate their potential impacts on health and the environment, to protect against them in an adequate manner, or to provide adequate emergency response measures in that:
>
> a) No adequate plan for protection against accidental mishandling of storage containers has been provided.
>
> b) No adequate plan for protection against terrorist attack (by ground or air) which could result in the rupture of the storage containers has been provided.
>
> c) No adequate plan for protection against mishaps or terrorism during transportation of radioactive material to the facility has been provided.

d) No adequate plan for emergencies has been provided in that PFS has not secured commitments from local emergency responders.

e) No adequate plan for handling the impacts stemming from natural disasters such as wildfires has been provided.

2. Applicant's Response to the Contention

The Confederated Tribes raise various issues in Contention B, which the Applicant addresses below.

a) Mishandling of Storage Containers

The Confederated Tribes make the unsupported claim that "[n]o adequate plan for protection against accidental mishandling of storage containers has been provided."[109] Petition at 4. They provide no other information or support for this contention.

The Applicant has extensively addressed the consequences of a potential cask mishandling, and has concluded that the result of even a severe cask mishandling would be inconsequential. See SAR ("SAR"), § 8.2.6, "Hypothetical Storage Cask Drop/TipOver." The limiting height for a cask drop event is ten inches because the cask transporter is designed to mechanically prevent a storage cask lift of more than 10 inches above the ground. The Safety Analysis Report has analyzed a cask drop from this

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[109] Confederated Tribes assert that NRC emergency planning regulations at 10 C.F.R. § 70.22 require license applicants to describe each type of radioactive materials accident for which protective action may be needed. But the Applicant's license application was submitted pursuant to Part 72 and, therefore, § 70.22 (which concerns information required in materials licenses applications under 10 C.F.R. Part 70) is inapplicable. Presumably, Petitioners were referring to § 72.32(a) which requires each application for an ISFSI to include an Emergency Plan that identifies each type of radioactive materials accident, among other requirements.

maximum height. As analyzed in the Safety Analysis Report, "storage cask end drops of up to 10 inches would not result in canister breach, and the storage cask would retain its structural integrity and continue to provide shielding and natural convection cooling for the canister." SAR at § 8.2.6.1.

Even though they are "hypothetical events [with] no credible causes," the Safety Analysis Report also analyzes "storage cask tipover accidents, and storage cask vertical end drop accidents from heights greater than 10 inches." SAR at 8.2-30. Further, despite the improbability of such an event, the Safety Analysis Report provides a plan to contend with a storage cask tipover/drop accident. See SAR at 8.2-35, 36.

Although the Safety Analysis Report discusses cask handling accidents and a plan for coping with them, the Confederated Tribes neither refer to the Application nor provide any reasons to support their contention as required by 10 C.F.R. § 2.714(b)(2)(iii). Nor do they provide a "concise statement of the alleged facts or expert opinion" supporting the contention together with references to "specific sources and documents . . . on which the petitioner intends to rely to establish those facts or expert opinion" required by 10 C.F.R. § 2.714(b)(2)(ii). In Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 246 (1993) ("Rancho Seco"), the petitioner similarly made no showing that the findings contained in the applicant's Environmental Assessment were erroneous; "identifie[d] no specific additional information that . . . should have been included and might [have] affect[ed] any conclusions in the EA . . . [and] identif[ied] no facts or expert opinion, and

reference[d] no documents or other sources establishing the existence of a genuine dispute on a material issue of law or fact." The Board therefore found the contention to be "fatally flawed" and rejected it. Rancho Seco, LBP-93-23, 38 NRC at 247-48. The Board should similarly reject Confederated Tribes' contention.

Confederated Tribes state as a general matter that, "under NEPA, PFS must assess the consequences of reasonably foreseeable low probability worst case accidents." Contention B at 3 (emphasis added). But their reference to NEPA in its contention does not in any way lessen the pleading requirements of § 2.714. NEPA does not require assessment of consequences of unforeseeable, remote and speculative accident scenarios; such scenarios need not even be considered. Vermont Yankee Nuclear Power Corporation (Vermont Yankee Nuclear Power Station), ALAB-876, 26 NRC 277 (1987) ("NEPA does not require NRC consideration of severe, beyond design-basis accidents because they are, by definition, highly improbable--i.e., remote and speculative events.").

For example, the Appeal Board in Pacific Gas and Electric Company (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-877, 26 NRC 287 (1987) rejected a contention alleging the possibility of a zircalloy cladding fire due to loss of water from the spent fuel pool. The Board stated:

> [N]either the contention nor the basis assigned for it contains an adequate explanation respecting why there is a reasonable possibility that the spent fuel pools would lose sufficient water to give rise to the chance of a fuel cladding fire and resultant radiation release.

Id. at 292. The Board then laid out possible scenarios that could lead to a significant loss of pool water but concluded that "the likelihood of such an untoward occurrence having that result is remote." Id. at 293. The Board then emphasized that "NEPA does not require NRC consideration . . . of highly improbable--i.e., remote and speculative--events." Id. Rather, the Board placed the burden on the intervenor to establish the likelihood of such an event. It said, ". . . it was incumbent upon the intervenor to provide at least some reason to think that . . . the possibility of an event causing a major loss of spent fuel pool water was sufficiently great to remove the hypothesized fuel cladding fire from the realm of the remote and speculative." Id.

Confederated Tribes have failed to do so here. They have provided no technical analyses, expert opinion, or other information in support of their contention that the Applicant's plan for protection against accidental mishandling of storage containers is inadequate as required by the Commission's amended rule of procedures. See Section II. C. supra. Their contention is a bald conclusory assertion, totally devoid of supporting bases and as such the contention must be rejected as "fatally flawed." Rancho Seco, LBP-93-23, 38 NRC at 248.

b) No Adequate Plan for Protection Against Terrorist Attack

Subpart (b) of the contention alleges that "[n]o adequate plan for protection against terrorist attack (by ground or air) which could result in the rupture of the storage containers has been provided." Confederated Tribes Petition at 3. Again, Confederated Tribes have utterly failed to comply with the requirements of § 2.714(b)(2). They have

neither identified a credible terrorist attack scenario nor set forth any factual bases to support a terrorist attack scenario that could result in breach of a canister. Nor have they identified any way in which the security of the facility is inadequate. This subpart is fatally flawed in the same way as subpart a and, for the same reasons stated in part a above, this part of the contention must also be dismissed.

Furthermore, in similar contexts, licensing boards have rejected out-of-hand contentions that allege vulnerability to an air attack. In Carolina Power and Light Company (Shearon Harris Nuclear Power Plant, Units 1 and 2), LBP-82-119A, 16 NRC 2069 (1982), the Board rejected the petitioner's contention that the Applicant's safety analysis was deficient in that it failed to consider the "consequences of terrorists commandeering a very large airplane . . . and diving it into the containment." Id. at Eddleman Contention 52 at 2098. The grounds for rejection were that in accordance with 10 C.F.R. § 50.13, read in pari materia with Section 73.1:

> Military style attacks with heavier weapons are not a part of the design basis threat for commercial reactors. Reactors could not be effectively protected against such attacks without turning them into virtually impregnable fortresses at much higher cost. Thus, [a]pplicants are not required to design against such things as . . . kamikaze dives by large airplanes, despite the fact that such attacks would damage and may well destroy a commercial reactor.

Carolina Power and Light Company, LBP-92-119A, 16 NRC at Eddleman Contention 52 at 2098. Applying the same logic here, Applicant should not be required to design the PFSF as an impenetrable fortress, impervious to any attack, no matter how incredible the postulated scenario.

c) Mishaps or Terrorism During Transportation of Canisters to the PFSF

Confederated Tribes allege in this subcontention that "[n]o adequate plan for protection against mishaps or terrorism during transportation of radioactive material to the facility has been provided." Petition at 3. As with subparts a and b, the Confederated Tribes have failed to set forth any bases to support this contention. In addition, this subpart of the contention must be dismissed because the transportation of spent fuel is outside the scope of this hearing.

As discussed in Section III.B above, contentions are not cognizable unless they are material to a matter that falls within the scope of the proceeding for which the licensing board has been delegated jurisdiction as set forth in the Commission's Notice of Opportunity for Hearing. The Notice of Opportunity for Hearing in this case delineates the scope of the present licensing proceeding to include only the consideration of "an application . . . for a materials license, under the provisions of 10 C.F.R. [P]art 72, . . . to possess spent fuel and other radioactive materials associated with spent fuel storage in an [ISFSI] located on the Skull Valley Goshute Indian Reservation . . . ." 62 Fed. Reg. 41,099 (1997) (Notice of Opportunity for Hearing). While ISFSIs are licensed under Part 72, the transportation of spent fuel is governed by Part 71 and other provisions, but not Part 72. 10 C.F.R. § 71.0. Thus, this subpart of the contention must be rejected as beyond the scope of the hearing.

d) No Adequate Plan for Emergencies

The Confederated Tribes allege that the Applicant has not provided for adequate emergency response in that it "has not secured commitments from local emergency responders." Confederated Tribes Petition at 4. The Confederated Tribes incorporate by reference, Exhibits 2(1) and 2(2) from the State of Utah's Motion to Suspend Licensing Proceedings, October 1, 1997, without indicating their relevance to the contention. See Confederated Tribes Petition at 4.

This subcontention must be dismissed as an as an impermissible attack on the NRC's regulations for advocating stricter standards than they impose. See Section II.B supra at 6. Contrary to the Confederated Tribes' claim, nothing in 10 C.F.R. § 72.32(a) requires the Applicant to "secure commitments" from offsite response organizations. Confederated Tribes Petition at 4; see 10 C.F.R. § 72.32(a). In fact, the NRC expressly rejected a suggestion that the regulations should "include the requirement that arrangements should be made (such as letters of agreement) with [offsite emergency response] organization[s]." 60 Fed. Reg. 32430 (1995) (Statements of Consideration, response to public comments on proposed 10 C.F.R. § 72.32). The NRC's rationale was that such arrangements or agreements were unnecessary: "offsite response organizations will respond in the event of an actual emergency in order to protect the health and safety of the public." Id. Therefore, there is no requirement that the Applicant secure commitments or agreements from any offsite response organization and hence, this subcontention must be dismissed as an impermissible collateral attack on the NRC's rules.

Next, regarding the Confederated Tribes' incorporation by reference of unspecified material from the State of Utah's Motion to Suspend Licensing Proceedings, Confederated Tribes Petition at 4, this subcontention must be dismissed for being vague and nonspecific. "[N]either Section 189a of the [Atomic Energy] Act nor Section 2.714 of the Rules of Practice permits the filing of a vague, unparticularized contention, followed by an endeavor to flesh it out through discovery against the [A]pplicant . . . ." Duke Power Company (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 NRC 460, 468 (1982), vacated in part on other grounds, CLI-83-19, 17 NRC 1041 (1983). "The Commission expects parties to bear their burden and to clearly identify matters on which they intend to rely with reference to a specific point." Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), CLI-89-3, 29 NRC 234, 241 (1989). The Confederated Tribes do not indicate in any way which material within the incorporated documents is pertinent to this subcontention. See Confederated Tribes Petition at 3. Therefore, this subcontention must be dismissed.

The documents cited by the Confederated Tribes are questionnaires from the State to the Tooele Valley Hospital and Tooele Police Chief on which each indicated that they had not been contacted by PFS. See State of Utah's Motion to Suspend Licensing Proceedings, dated October 1, 1997, Exhibit 2(1) and 2(2). To the extent Confederated Tribes seek to claim by reference to these letters that Applicant failed to notify and "allow the offsite response organizations expected to respond in case of an accident 60 days to comment on the . . . [Applicant's] emergency plan before submitting it to the NRC," as required by 10 C.F.R. § 72.32(a)(14), the Applicant's Claim must be rejected,

because it ignores relevant material submitted by the Applicant. See Section II.C, pp. 15-16, supra. As required by 10 C.F.R. § 72.32(a)(14), the Applicant provided the Emergency Plan to the Tooele County Department of Emergency Management—the offsite response organization it expected to respond (and coordinate responses) to an onsite emergency at its proposed ISFSI—at least 60 days before submitting its application to the NRC. Letter from Kari Sagers, Director, Tooele County Department of Emergency Management, to John D. Parkyn, Chairman of the Board, PFSLLC (June 3, 1997), included in Emergency Plan; see Northern States Power, DD-97-24, 62 Fed. Reg. at 51,917. Therefore the Applicant has complied with the applicable regulatory requirements and this subcontention must be dismissed.

e) Natural Disasters--Wildfires

The Confederated Tribes allege that the Applicant has not provided an adequate plan for "handling the impacts stemming from natural disasters such as wildfires" (Subcontention e, supra). Confederated Tribes Petition at 4. Referring to Exhibit 2(5) attached to the State of Utah's motion to suspend licensing proceedings, the Confederated Tribes claim that "in the short span of only ten years there have been 48 wildfires at Skull Valley" half of which were started by lightening. Id.

This subcontention must be dismissed because it makes allegations without providing "concise statements of the alleged facts or expert opinion which supports" the allegations and it provides no "references to . . . specific sources and documents . . . on which the petitioner intends to rely to establish [said] facts or expert opinion." 10 C.F.R.

§ 2.714(b)(2)(ii). While the Confederated Tribes provide a factual basis for the occurrence of fires in the Skull Valley generally, they provides no factual or expert opinion basis for believing that such fires would threaten the integrity of the spent fuel storage casks. See Confederated Tribes Petition at 4; compare EP at 2-15 to 16 (onsite fires below specified duration and temperature do not warrant classification as Alerts). For such a contention to be admitted, a petitioner must set forth a "technical basis in references or expert opinion" in order to support a claim that an accident scenario will cause an accidental release of radioactive materials. Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 302 (1995). Confederated Tribes have not done so here.

Moreover, if a petitioner contends that a license application is inadequate on the basis of an analogy between the applicant's facility and a proposed benchmark (i.e., the previous fires in the Skull Valley), the petitioner must establish that the benchmark is valid to show that the analogy raises a disputed material issue of fact with the applicant. Yankee Atomic Electric Company (Yankee Nuclear Power Station), LBP-96-15, 44 NRC 8, 32 (1996); Yankee Atomic Electric Company (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 267 (1996) (petitioner must show "logical relationship" with alleged analogy). Again, Confederated Tribes have failed to do so, and therefore this contention must be rejected.

Further, the document that Confederated Tribes cite as a factual basis for their subcontention does not support their contention in that it suggests that wildfires would not threaten the integrity of the fuel storage casks. "Given the proposed method of

storage and fuel types . . . [t]he fuel rods should not be combustible given they will be sealed in steel and concrete." Memorandum from Dave Schen, Utah Department of Natural Resources, Division of Forestry, Fire and State Lands, to Jamie Dalton, Energy & Resource Planning (May 27, 1997), in Exhibit 2(5) to State of Utah's Motion to Suspend Licensing Proceedings, cited in Confederated Tribes Petition at 4 (emphasis added). A contention lacks a cognizable basis and must be dismissed if the document cited as its basis does not support the point for which it is urged. Vermont Yankee Power Corporation (Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29, 48 (1989), vacated in part on other grounds and remanded, CLI-90-4, 31 NRC 333 (1990) Thus, not only have the Confederated Tribes failed to provided facts or analysis to establish a credible accident scenario here, the document they cite as the factual basis for their subcontention suggests the opposite of what they assert. Therefore, this subcontention must be dismissed.

Moreover the contention overall is vague and unspecific and must be rejected as such. It claims that no adequate plan for handling impacts stemming from natural disasters such as wildfires has been provided. It fails to identify what the impacts are that have not been handled, fails to identify (other than wildfires) those natural disasters for which it claims the Plan is adequate and with respect to wildfires it has not identified the respects in which it claims the Plan is inadequate. In fact, the Emergency Plan and the Safety Analysis Report do address many potential emergency conditions, including natural disasters and fires, and means for mitigating their consequences. See EP Chapters

2 and 3 (addressing lightning, earthquakes, tornadoes, floods, and extreme temperatures); SAR Chapter 8.

Specifically regarding fires, the Emergency Plan states that fires of specified severity may warrant the declaration of an alert at the site. EP at 2-12 to 16. The ISFSI will possess a fire truck, firefighting equipment and trained personnel assigned to the site fire brigade to mitigate the effects of fires. EP at 3-5. Furthermore, the Applicant's firefighting capability will be supplemented by offsite Bureau of Land Management and Tooele County capabilities. EP at 3-5; SAR at xx. Regarding water supply, the onsite water storage tanks will be sized to handle onsite firefighting and other PFS needs. SAR at 2.5-5, 4.3-4 to 5. Additional water, if needed, can be obtained from the Reservation's water supply. ER at 4.2-4.

Although claiming that the Plan is inadequate, Confederated Tribes, similar to Rancho Seco, have identified no respect in which they contend the Plan is inadequate and have provided no facts or expert opinion to establish a genuine dispute on a material issue of law or fact with respect to the adequacy of the Plan. Therefore as in the Rancho Seco case, this contention must be dismissed as "fatally flawed." See Rancho Seco at 247-248.

Finally, "regulations do not require dedication of [planning] resources to handle every possible accident scenario that can be imagined. The concept of . . . regulation is that there should be core planning with sufficient planning flexibility to develop a reasonable ad hoc response to . . . very serious low probability accidents . . . ." Philadelphia Electric Company (Limerick Generating Station, Units 1 and 2), LBP-84-31,

20 NRC 446, 535 (1984) (quoting Southern California Edison Company (San Onofre Nuclear Generating Station, Units 2 and 3), CLI-83-10, 17 NRC 528, 533 (1983)); accord 60 Fed. Reg. 32,430, 32,435 (1995) (Statement of Considerations, 10 C.F.R. § 72.32) ("Emergency planning focuses on the detection of accidents and the mitigation of their consequences . . . not [ ] on the initiating events."). Therefore, the Applicant need not address any specific accident scenario in its Emergency Plan so long as it provides for the capability to respond to such a scenario. Because the Confederated Tribes have overlooked the response capability that the Applicant's Emergency Plan provides, this subcontention must be dismissed.

C. Confederated Tribes Contention C: Inadequate Assessment of Costs Under NEPA

1. The Contention

The Confederated Tribes allege in Contention C that:

> PFS has not adequately described or weighed the environmental, social, and economic impacts and costs of operating the ISFSI. Indeed, there is no adequate benefit-cost analysis which even demonstrates a need for the ISFSI. On the whole, Petitioners contend that the costs of the project far outweigh the benefits of the proposed action. See, e.g., Public Service Co. of New Hampshire, 6 NRC 33, 90 (1977).

Confederated Tribes Petition at 5. The asserted bases for the contention are set forth in two pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated incorporating the specific allegations in its bases as indicated below:

PFS has not adequately described or weighed the environmental, social, and economic impacts and costs of operating the ISFSI, has not performed an adequate benefit-cost analysis which even demonstrates a need for the ISFSI, and has not recognized that the costs of the project far outweigh the benefits of the proposed action, (see, e.g., Public Service Company of New Hampshire, 6 NRC 33, 90 (1977)), in that PFS has:

a) Failed to discuss the environmental impacts caused by the storage of a large amount of radioactive waste, for which no realistic disposal options currently exist.

b) Failed to discuss the environmental impacts caused by creating an ISFSI without an adequate decommissioning plan for the facility.

c) Failed to discuss the environmental impacts resulting from severe low probability accidents which may cause the release of discharges which exceed legal limits.

d) Failed to adequately assess the environmental impacts stemming from underestimating the costs associated with decommissioning the project.

e) Failed to present a complete or adequate assessment of the potential environmental impacts of the ISFSI on ground and surface water.

f) Failed to recognize that the ISFSI will also have a dramatic economic and sociological impact on the minority community residing on the Skull Valley Reservation.

2. Applicant's Response to the Contention

The Confederated Tribes raise a number of issues under Contention C, which we address in turn below.

a) Storage of Waste with No Realistic Disposal Options

The Confederated Tribes assert that the Applicant has "[f]ail[ed] to discuss the environmental impacts caused by the storage of a large amount of radioactive waste, for which no realistic disposal options currently exist." Confederated Tribes Petition at 5. The Applicant will address the issue of the environmental impact of waste storage first and then the issue of whether a realistic disposal option exists.

(i) The Environmental Impact of Waste Storage

This subcontention must be dismissed because it provides neither a "concise statement of the alleged facts or expert opinion" in its support nor "references to specific sources and documents . . . on which the petitioner intends to rely to establish [the] facts or expert opinion" on which it bases its contention. 10 C.F.R. § 2.714(b)(2)(ii). The Confederated Tribes refer to no facts, expert opinion, or documents to support a claim regarding any ostensible environmental impacts of the ISFSI. See Confederated Tribes Petition at 5. The Confederated Tribes' subcontention is utterly devoid of a factual basis, contrary to the requirements of 10 C.F.R. § 2.714(b)(2)(ii). Thus, this subcontention must be dismissed.

This subcontention must also be dismissed for not containing "a specific statement of the issue of law or fact to be raised or controverted," 10 C.F.R. § 2.714(b)(2) (emphasis added), and "references to the specific portions of the application . . . that the petitioner disputes," 10 C.F.R. § 2.714(b)(2)(iii) (emphasis added). A Board may not admit, for any reason, a contention that fails to meet the specificity requirements of 10 C.F.R. § 2.714(b)(2). Duke Power Company (Catawba Nuclear Station, Units 1 and 2),

ALAB-687, 16 NRC 460, 467 (1982), vacated in part on other grounds, CLI-83-19, 17 NRC 1041 (1983) (emphasis in original). The Confederated Tribes specify neither the environmental impacts that the Applicant has allegedly not addressed nor the parts of the application that are allegedly defective. See Confederated Tribes Petition at 5. Thus, the subcontention is nonspecific and must be dismissed.

This subcontention must be also dismissed because it mistakenly claims that the applicant failed to address a relevant issue in the application. See Section II.C, pp. 15-16, supra. The Environmental Report addresses the environmental effects of ISFSI operations in great detail. See ER chapters 4, 5, and 7. Confederated Tribes have set forth nothing to create a litigable issue with respect to any of this information.

(ii) Realistic Disposal Options

The Confederated Tribes allege that "no realistic disposal options currently exist" for spent nuclear fuel. Confederated Tribes Petition at 5. This part of the subcontention is "barred as a matter of law" because it attacks a generic determination of the NRC. See, Section II.B supra. The NRC has determined, as a matter of law, that indeed, a realistic disposal option for spent nuclear fuel does exist:

> [T]here is reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century, and sufficient repository capacity will be available within 30 years beyond the licensed life for operation of any reactor to dispose of the . . . spent fuel originating in such reactor and generated up to that time.

10 C.F.R. § 51.23(a) (emphasis added). Therefore, this subcontention must be dismissed.

b) Inadequate Decommissioning Plan

The Confederated Tribes assert that the Applicant has "[f]ail[ed] to discuss the environmental impacts caused by creating an ISFSI without an adequate decommissioning plan for the facility." Confederated Tribes Petition at 4.

This subcontention must be dismissed because it provides neither a concise statement of the alleged facts or expert opinion in its support nor references to specific sources and documents to establish the facts or expert opinion. 10 C.F.R. § 2.714(b)(2)(ii). The Confederated Tribes refer to no facts, expert opinion, or documents to support a claim that the Applicant's decommissioning plan is inadequate or that any environmental effects would result from its flaws. See Confederated Tribes Petition at 5. This subcontention is also devoid of a factual basis and must be dismissed.

This subcontention must also be dismissed for containing neither a specific statement of the issue of law or fact to be raised nor references to the specific portions of the application that the petitioner disputes. 10 C.F.R. §§ 2.714(b)(2), (b)(2)(iii). A Board may not admit a contention that fails to meet the specificity requirements of 10 C.F.R. § 2.714(b)(2). Catawba, ALAB-687, 16 NRC at 467. The Confederated Tribes specify neither the environmental impacts of decommissioning that the Applicant has allegedly failed to addressed nor the parts of the decommissioning plan that are allegedly defective. See Confederated Tribes Petition at 5. Thus, the subcontention is nonspecific and must be dismissed.

This subcontention must be also dismissed because it mistakenly claims that the applicant failed to address a relevant issue in the application. See Section II.C.2 supra. The Application contains a decommissioning plan and addresses the environmental impacts of decommissioning. See LA App. B; ER at 4.6-1 to 3. The Confederated Tribes have provided no basis for challenging any of this information.

c) Severe Low Probability Accidents

The Confederated Tribes allege that the Applicant has failed to assess the impacts of the proposed licensing action and to weigh its costs and benefits in that it fails to discuss the impacts resulting from "severe low probability accidents which may cause the release of discharges which exceed legal limits." Confederated Tribes Petition at 5.

This subcontention must be dismissed because it provides neither a concise statement of the alleged facts or expert opinion in its support nor references to specific sources and documents to establish the facts or expert opinion. 10 C.F.R. § 2.714(b)(2)(ii). The Confederated Tribes refer to no facts, expert opinion, or documents to support their claim that there exists any "severe low probability accidents" which have not been analyzed by Applicant or that such an accident could "cause the release of discharges that exceed legal limits." See Confederated Tribes Petition at 5. The Confederated Tribes have not even defined the type of accident it postulates, and have set forth no factual basis at all to suggest such an accident or release is possible or how it might occur. Therefore, this subcontention must be dismissed.

Furthermore, the Confederated Tribes' subcontention does not meet NRC standards for the admission of contentions premised on accidents:

> [W]hen a postulated accident scenario provides the premise for a contention, a causative mechanism for the accident must be described and some credible basis for it must be provided. If a contention claims that an EIS is necessary or inadequate in some respect, the "rule of reason" by which NEPA is to be interpreted provides that agencies need not consider "remote and speculative" risks or "events whose probabilities they believe to be inconsequentially small." In addition, the Supreme Court has . . . held that . . . NEPA [does not] require a "worst case analysis."

Vermont Yankee Nuclear Power Corporation (Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29, 44 (1989), vacated in part on other grounds and remanded, CLI-90-4, 31 NRC 333 (1990) (citing, e.g., Limerick Ecology Action, Inc. v. NRC, 869 F.2d 719, 739 (3d Cir. 1989); see also Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 354-56 (1989)). Without a "causative accident scenario" and a "credible basis," a postulated accident is "a matter of conjecture, beyond the rule of reason," and thus cannot be considered to be "reasonably foreseeable." Vermont Yankee, ALAB-919, 30 NRC at 51 n.30. Hence, such an accident is not cognizable under NEPA. The Confederated Tribes provide neither causative mechanism nor credible basis for any accident scenario. See Confederated Tribes Petition at 5. Therefore, this subcontention must be dismissed.

d) Underestimate of Decommissioning Costs

The Confederated Tribes assert that the Applicant has "[f]ail[ed] to adequately assess the environmental impacts stemming from underestimating the costs associated with decommissioning the project." Confederated Tribes Petition at 5.

Like Subcontention (b), this subcontention must be dismissed because 1) it has no factual basis regarding environmental impacts whatsoever, 2) it is nonspecific, and 3) it ignores relevant material submitted by the applicant, see LA Appendix B. See supra Subcontention (b).

Moreover, this subcontention must be dismissed because challenges to the reasonableness of an applicant's decommissioning cost estimates are not admissible unless the petitioners show that "there is no reasonable assurance that the amount will be paid." Yankee Atomic Electric Company (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1, 9 (1996). Without such a showing the only relief available would be "the formalistic redraft of the plan with a new estimate." Id. Such relief is not sufficient to warrant consideration of a contention. See supra Confederated Tribes Contention A.

e) Impact on Ground and Surface Water

The Confederated Tribes claim that the Applicant has "[f]ail[ed] to present a complete or adequate assessment of the potential environmental impacts of the ISFSI on ground and surface water." Confederated Tribes Petition at 5. "The environmental report should fully evaluate the potential impacts of the proposed project on the ground and surface water in the area, and discuss in detail the manner in which such waters will be kept free from contamination." Id. at 6.

This subcontention must be dismissed because it provides neither a concise statement of the alleged facts or expert opinion in its support nor references to specific sources and documents to establish the facts or expert opinion. 10 C.F.R. §

2.714(b)(2)(ii). The Confederated Tribes refer to no facts, expert opinion, or documents to support a claim that the ISFSI will have any detrimental effects on ground or surface water. See Confederated Tribes Petition at 5-6. This subcontention is utterly devoid of a factual bases and must be dismissed.

This subcontention must also be dismissed for containing neither a specific statement of the issue of law or fact to be raised nor references to the specific portions of the application that the petitioner disputes. 10 C.F.R. §§ 2.714(b)(2), (b)(2)(iii). A board may not admit a contention that fails to meet the specificity requirements of 10 C.F.R. § 2.714(b)(2). Catawba, ALAB-687, 16 NRC at 467. The Confederated Tribes do not specify any effects that the ISFSI allegedly has on ground or surface water. See Confederated Tribes Petition at 5. Thus, the subcontention is nonspecific and must be dismissed.

This subcontention must be also dismissed because it mistakenly claims that the applicant failed to address a relevant issue in the application. The Environmental Report addresses the effects of ISFSI operation on ground and surface water. See ER at 2.5-5 to 12, 4.1-10, 4.2-4 to 5, 4.3-6, 4.4-3 to 4, 4.5-1 to 2.

f) Economic and Sociological Impacts on a Minority Community

The Confederated Tribes assert that the ISFSI will also have "a dramatic economic and sociological impact on the minority community residing on the Skull Valley Reservation." Confederated Tribes Petition at 6. They allege that the proposed siting of the ISFSI in a minority community follows an ostensible national pattern of

siting hazardous waste facilities (citing The United Church of Christ, Toxic Wastes and Race in the United States (1987)) and that race was "the most significant among variables tested" in association with the location of waste facilities. Confederated Tribes Petition at 6. The Confederated Tribes assert that "no attempt has been made . . . to avoid or mitigate the disparate impact of the proposed facility on this minority community." Id. The Confederated Tribes also claim that "no assessment of the impacts upon Indian religious ceremonies or visits by Indians to the Skull Valley burial ground has been made." Id. Finally, the Confederated Tribes claim that there is no mention of the amount of the benefit the community will derive from the project; specifically the amount payable to the Skull Valley Band has not been disclosed, so it is "impossible to do a benefit-cost comparison."

This subcontention must be dismissed for a number of reasons. First, this subcontention must be dismissed because the Confederated Tribes provide absolutely no factual basis to support their claims regarding any impact of the ISFSI on the environment. See Confederated Tribes Petition at 6-7. The report they cite regarding the locating of hazardous waste facilities on the basis of race is not germane to the issues in this hearing. The report says nothing about the ISFSI or any impact it might have on the surrounding environment. The Confederated Tribes allege that the application contains no assessment of the impacts of the ISFSI on Indian religious ceremonies or visits to Indian burial grounds, but they do not even allege that it will have any impacts in the first place, let alone support such an allegation with any facts. See Confederated Tribes Petition at 6. On the other hand, the application states that "[c]onsultation with the Utah

State Historic Preservation Officer . . . and the Skull Valley Band of Goshute Indians indicates that the areas within Skull Valley Reservation affected by project construction and operation contain no cultural or historic resources or areas of religious significance to the Skull Valley Band." ER at 4.1-18. In short, this subcontention is baseless and must be dismissed.

Second, regarding the Confederated Tribes allegation that the Applicant's NEPA cost-benefit analysis is inadequate because the Applicant does not disclose the terms of its lease with the Skull Valley Band,[110] this subcontention must be dismissed because it overlooks relevant material submitted by the Applicant. See, Section II.C, pp. 15-16, supra. The Environmental Report states that "[t]he direct costs of the PFSF include . . . annual costs associated with the Tribal lease." ER at 7.3-1. The total life-cycle cost of the facility is given as $1.536 billion. Id. Therefore, because this subcontention overlooks the fact that the cost of the Tribal lease has been incorporated into the total cost of the facility, the subcontention must be dismissed.

Moreover, this subcontention regarding the details of the lease must also be dismissed because none of the NRC's environmental regulations require the Applicant to provide the details of the lease by which it will obtain use of the land for the facility. See 10 C.F.R. § 51.45. 10 C.F.R. § 51.45 requires the Applicant to include the economic costs of the proposed facility in its environmental analysis. 10 C.F.R. § 51.45(c). 10

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[110] The Applicant addresses the fact that the details of the Applicant's lease with the Skull Valley Band are not required to be provided under the Commission's regulations or under NEPA in greater detail in its response to Castle Rock Contention 15.

C.F.R. § 51.45 does not, however, require the Applicant to describe one component of these economic costs, the details of its lease arrangement with the Skull Valley Band. See also Idaho Conservation League v. Mumma, 956 F.2d 1508, 1522-23 (9th Cir. 1992) ("NEPA does not require a particularized assessment of non-environmental impact").

D. Confederated Tribes Contention D: Inadequate Discussion of No-Action Alternative.

1. The Contention

Confederated Tribes allege in Contention D that:

> PFS has failed to satisfy the requirements of NEPA because it does not adequately discuss the alternatives to the proposed action.

Confederated Tribes Petition at 5. The asserted bases for the contention are set forth within three sentences on the same page in which Confederated Tribes claim that PFS "has failed to discuss the no-action alternative." Confederated Tribes Petition at 5-6. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its bases:

> PFS has failed to satisfy the requirements of NEPA in that:
>
> (a) Applicant does not adequately discuss alternatives to the proposed action that are available for reducing or avoiding adverse environmental effects
>
> (b) Applicant has failed to discuss the no-action alternative.

2. Applicant's Response to the Contention

a) Failure to Discuss Alternatives Available for Reducing or Avoiding Adverse Environmental Effects

Confederated Tribes alleges that Applicant has violated NEPA in that it has failed to discuss alternatives available for reducing or avoiding adverse environmental effects. This contention must be dismissed for lack of basis and specificity. Confederated Tribes have provided no facts or expert opinion on which to support its contention, in violation of § 2.714(b)(2)(ii). That regulation requires that a petitioner provide:

> A concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing, together with references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion. 10 C.F.R. § 2.714(b)(2)(ii).

The Rules of Practice require that a petitioner include facts in support of its position in order to demonstrate that a genuine dispute as to a material issue of law or fact exists. 54 Fed. Reg. at 33,170. Such a requirement is consistent with judicial decisions, such as Connecticut Bankers Ass'n v. Board of Governors, 627 F.2d 245, 251 (D.C. Cir. 1980) which held that

> [A] protestant does not become entitled to an evidentiary hearing merely on request, or on a bald or conclusory allegation that . . . a dispute exists. The protestant must make a minimal showing that material facts are in dispute, thereby demonstrating that an "inquiry in depth" is appropriate.

Id. Thus, Confederated Tribes' statement which "simply alleges that some matter ought to be considered" does not provide a sufficient basis for an admissible contention. See Section II.C.1 supra at 13.

b) Failure to Discuss the No-action Alternative

Confederated Tribes assert that Applicant has failed to adequately discuss alternatives to the proposed action in that it has failed to discuss the no action alternative. According to Confederated Tribes, "[i]n view of the significant environmental costs of this project and the fact that PFS has not demonstrated a need for the facility, this alternative should have been given substantially more attention." Confederated Tribes Petition at 6.

This contention mistakenly ignore relevant information in the Environmental Report and must be dismissed. Confederated Tribes completely ignore that the Applicant has discussed the no-action alternative in the Environmental Report at section 8.1.2. That discussion considers the deleterious consequences that would result from a decision not to build the facility. Included among those consequences are the premature shutdown of currently operational nuclear power plants and delayed decommissioning and increased maintenance expenses for permanently shutdown reactors. Additional adverse environmental consequences would likely result from the proliferation at plant sites of onsite ISFSIs, which would thereby increase the complexity and cost of preparing and shipping spent fuel to a permanent federal repository and increase the decommissioning

burden for utilities. ER at 8.1-3. A contention which mistakenly claims that the Applicant failed to address a relevant issue in the application must be dismissed.

Further, CEQ guidelines issued to assist federal agencies in complying with the National Environmental Policy Act have noted that "no-action" means that the project will not take place.[111] In the context of a licensing decision, there are two alternatives: to grant the license or to deny the license. The costs and benefits of granting the license will be reversed if the license is denied. (See, e.g., South Louisiana Environmental Council, Inc. v. Sand, 629 F.2d 1005, 1017 (5th Cir. 1980), stating that ". . . obviously, the adverse environmental effects would not take place were the project to be stopped . . . ."). Since the Applicant has identified and evaluated the environmental impacts of proceeding with the proposed action,[112] it has ipso facto identified the benefits of not proceeding. Petitioner again has ignored this relevant information in the Environmental Report and has merely advocated additional discussion of issues. Such a contention is not admissible and must be rejected. Under the NRC's amended Rules of Practice, a contention "that simply alleges that some matter ought to be considered," as Petitioners have alleged here is not an admissible contention.

As part of its asserted basis for this contention, Confederated Tribes allege that the Applicant has failed to demonstrate a "need" for the facility. Confederated Tribes Petition at 6. Here again, Confederated Tribes completely ignores pertinent information

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[111] Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations (Q.3), 46 Fed. Reg. 18,026. (Mar. 23, 1981).
[112] These impacts are addressed in Chapters 4, 5 and 7 of the Environmental Report.

contained in the Environmental Report. Need for the facility is addressed in the Environmental Report at section 1.2. That section, entitled, "Need for the Facility," discusses the economic and regulatory impediments to continued on-site storage, as well as the alarming shortage of available capacity in on-site spent fuel pools--a shortage which is likely to impede the continuing operation of commercial nuclear power plants, hamper their future decommissioning, and significantly raise the costs of that process. Because this contention mistakenly claims that the Applicant failed to address a relevant issue in the Application, it must be dismissed.

E. Confederated Tribes Contention E: Failure to Give Adequate Consideration to Adverse Impacts on the Historic District

1. The Contention

Confederated Tribes allege in Contention E that:

> PFS has failed to comply with NEPA in that it has not adequately discussed the impacts upon the historic district and the archeological heritage of the area.

Confederated Tribes Petition at 7. The asserted bases for the contention are set forth within four sentences on pages 7-8. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its bases:

> Contrary to the requirements of NEPA, PFS has failed to adequately discuss the impacts upon the historic district and the archeological heritage of the area in that it has not evaluated the impact of the facility on the Pony Express Trail which passes ten miles south of the Skull Valley Reservation area.

2. Applicant's Response to the Contention

In this contention, Confederated Tribes allege that PFS has not adequately evaluated the impact of the facility on the archaeological heritage or historic character of the area, in particular the historic Pony Express Trail passes about ten miles south of the Skull Valley Reservation area. Confederated Tribes Petition at 6. This contention must be dismissed for lack of an adequate basis, and because the Confederated Tribes ignore relevant information in the Environmental Report.

The impact of the facility on the historic character of the area has been assessed in four separate contexts: site preparation and facility construction, facility operation, construction and operation of the Skull Valley Road transport alternative, and construction and operation of the railroad spur alternative.

First, Section 4.1.8 of the Environmental Report evaluates the effects of the construction phase of the project on regional historical, cultural, scenic, and natural resources. That discussion concludes that "[n]o impacts on known historic, architectural, or cultural features will occur as a result of facility construction." ER at 4.1-18.

> The Iosepa Cemetery is the only known site listed, or eligible for listing, on the National Register of Historic Places, located in the Skull Valley project area. This historic period site is located approximately 9 miles from the proposed PFSF site, and therefore will not be affected by construction or operation of the proposed facility.
>
> Consultation with Utah State Historic Preservation Officer (SHPO) and the Skull Valley Band of Goshute Indians indicates that the areas within the Skull Valley Reservation affected by project construction and operation contain no cultural or historic resources or areas of religious significance to the Skull Valley Band."

Id.

Section 4.2.8 of the Environmental Report evaluates the effects of the Facility's operation on regional historic, cultural, scenic and natural features. That section concludes that "[n]o regional historic, archaeological, architectural, or cultural resources were identified in areas utilized for project operation. Therefore, no impacts on these resources will result from operation of the proposed facility." ER at 4.2-7.

The effects of construction and operation of the Skull Valley Road transport alternative were evaluated in Environmental Report Section 4.3.8. That section concludes that "only one historic property, the Iosepa cemetery located approximately one-half mile from the Skull Valley Road, has been identified in the project's area of potential effect." ER at 4.3-8. "A Class III cultural resource survey in the area of potential effect will be performed . . . . The survey will be conducted by an archaeological firm holding an active joint permit issued by [Bureau of Land Management and Utah State Historic Preservation Office]." Id. at 4.3-9.

Finally, ER section 4.4.8 discusses effects of construction and operation of the railroad spur alternative on regional, historical, cultural, scenic, and natural features. The discussion in that section notes that there are "nine canyons, knolls, or places that have high potential for the location of other historic properties . . . . These places are located from 500 ft to several miles from the PFSF site and transportation corridor. The rail spur construction area is situated at a considerable distance from the areas with high potential for containing archaeological sites." ER at 4.4-5.

These four sections of the Environmental Report conclude that there will be no significant impact on the historic district and the archaeological heritage of the area. Confederated Tribes do not contest that finding and provide no basis for their allegation that the Applicant has not adequately evaluated the impact of the facility on the historic character of the area. Furthermore, the contention's assertion that "the historic Pony Express Trail passes only about ten miles south of the Skull Valley Reservation area" (Confederated Tribes Petition at 6), is not sufficient to support its claim that Applicant has not adequately considered historic district impacts. Confederated Tribes allege no impacts to the Pony Express Trail from either the facility or the transportation corridor, nor do they explain how the Trail, situated "only about ten miles south of the Skull Valley Reservation Area" (Confederated Tribes Petition at 6) will, or could, be impacted by the facility. Since the Trail is 10 miles south of the Reservation, it is also at least 10 miles away from the closest possible approach to either the transportation corridor or the ISFSI site.

Because Confederated Tribes have provided no facts or other basis to support its contention that there may be adverse impacts on the Pony Express Trail or any other historic district or archaeological heritage of the area, the contention must be dismissed. Under the amended Rules of Practice, a petitioner must set forth "[a] brief explanation of the bases of the contention." 10 C.F.R. § 2.714(b)(2)(i). Further, a petitioner must provide:

> A concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing, together with references to those specific sources and

> documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion.

10 C.F.R. § 2.714(b)(2)(ii). Confederated Tribes have failed to do so here and therefore, the contention must be dismissed.

Furthermore, the Confederated Tribes' claim that Applicant's discussion of the impacts on the historic district was inadequate fails to consider the sections of the Environmental Report discussed supra. Confederated Tribes Contention E ignores relevant information in the Application; it must therefore be rejected. Similarly, here, Confederated Tribes ignore the fact that the Environmental Report discusses the impacts on the historic district and makes no showing that any of these matters are misstated. On these grounds, Confederated Tribes Contention E must be rejected.

F. Confederated Tribes Contention F: Failure to Adequately Establish Financial Qualifications

1. The Contention

Confederated Tribes allege in Contention F that:

> PFS has failed to demonstrate that it is financially qualified to build and operate the ISIS.

Confederated Tribes Petition at 8. The asserted bases for the contention are set forth in one and a half pages of discussion following the contention. In order to focus the analysis on whether the contention should be admitted, the Applicant proposes that the contention be restated as follows incorporating the specific allegations in its bases:

> PFS has failed to demonstrate that it is financially qualified to build and operate the ISFSI in that

a) The Application states that PFS is a limited liability company owned by eight U.S. utilities but the utilities are unnamed and individuals from only seven utilities are listed as directors. Also, there is no description of the assets of the limited liability company nor is there any mention or copy of any limited liability company agreement.

b) The Application provides no detail with respect to the basis for the estimated construction costs of $100 million and no effort has been made to show that the component costs have been legally pinned down with binding agreements.

c) While PFS indicates that it intends to obtain an additional $6 million from each of its participating companies, it has failed to provide any subscription agreements or other legally binding commitments which give any assurance of obtaining the necessary funding. PFS has failed also to show that the participating companies have any long term commitment to remain with the project to provide needed financial stability in the future.

d) PFS has failed to provide any documentary evidence that shows it will be able to raise the additional $52 million of additional capital through "service agreements" with customers nor have the terms of such agreements been provided.

e) PFS has not provided any information which would show the amount to be paid to the Skull Valley Band for rental of its lands and therefore it is unknown whether PFS has the financial capacity to meet this fundamental cost of the project.

2. Applicant's Response to the Contention

a) Limited Liability Company

In this subcontention, Confederated Tribes complain that there is insufficient information concerning PFS in that the participating utility members of PFS are

unnamed, there is no description of the assets of PFS, nor is there any mention or copy of any limited liability company agreement.

This contention must be rejected for a lack of basis. The contention claims that the License Application is deficient for an alleged lack of information concerning PFS. However, Confederated Tribes have failed to provide any supporting reasons for the asserted need of this information as required by 10 C.F.R. § 2.714(b)(2)(iii). That provision expressly provides that if a "petitioner believes that the application fails to contain information on a relevant matter as required by law," the petitioner must identify "each failure and the supporting reasons for the petitioner's belief . . . ." Id. Confederated Tribes set forth no legal requirement why the information that it has identified in this subcontention would be required contrary to 10 C.F.R. § 2.714(b)(2)(iii).

Further, the Confederated Tribes do not provide any basis to show that the alleged deficiency -- i.e. the asserted lack of information on the utilities owning the LLC-- will result in a lack of reasonable assurance of the Applicant obtaining the funds necessary to cover the construction and operation of the PFSF as required by the Commission's decisions in Yankee Atomic Electric Company (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1, 9 (1996) (Yankee Atomic I) and Yankee Atomic Electric Company (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 258 (1996) (Yankee Atomic II). In those cases, the Commission held that a petitioner challenging the adequacy of decommissioning funding or the decommissioning plan funding must do more than assert deficiencies in the plan or its estimates. Rather, petitioners must show "some specific, tangible link between the alleged errors in the plan and the health and safety impacts they

invoke." Yankee Atomic II, CLI-96-7, 43 NRC at 258. Thus, for example, challenges to the reasonableness of an applicant's decommissioning cost estimates are not admissible unless the petitioner shows that "there is not reasonable assurance that the amount will be paid." Yankee Atomic I, CLI-96-1, 43 NRC at 9. Without such a showing, the only relief available would be "the formalistic redraft of the plan with a new estimate." Id.

The same rationale would apply equally to challenges to the reasonable assurance of obtaining funds for construction and operation. A petitioner must show that its contentions have some health and safety significance, or else the Commission would be engaged in merely requiring additional information or analysis of no health and safety significance. See Id. Here, the Confederated Tribes merely seek additional information without establishing any basis for its significance, and thus the contention must be rejected. Id.

b) Lack of Detail and Binding Agreements

In this subcontention, Confederated Tribes assert that the Application provides no detail with respect to the basis for the estimated construction costs of $100 million and no effort has been made to show that the component costs have been legally pinned down with binding agreements. Neither point of this subcontention is admissible.

(i) Lack of Detail

The Confederated Tribes contention that the construction cost estimates lack sufficient detail must be dismissed as an impermissible challenge to agency regulation and for lack of a sufficient factual basis. 10 C.F.R. § 72.22(e) does not require detailed cost estimates in order to comply with its provisions. Indeed, as set forth in the response

to Utah Contention E, the Commission declined to apply the more detailed requirements of 10 C.F.R. Part 50 to ISFSI applicants under 10 C.F.R. Part 72. Therefore, Confederated Tribes' contention must be rejected as "advocat[ing] stricter requirements than those imposed by the regulations" and therefore an impermissible collateral attack on commission rules."

Further, Confederated Tribes have provided no factual basis to show that the estimated costs set forth in the Application are unreasonable. As stated by the Commission in Yankee Atomic II, the amended pleading requirements "places an initial burden on Petitioners to come forward with reasonably precise claims rooted in fact, documents, or expert opinion in order to proceed past the initial stage and toward a hearing." Yankee Atomic II, CLI-96-7, 43 NRC at 262. Here Confederated Tribes have failed to provide "alleged facts or expert opinion" with references to "specific sources and documents" as required under 10 C.F.R. § 2.714(b)(2)(ii) to support an allegation that Applicant's cost estimates are unreasonable. 10 C.F.R. § 2.714(b)(2)(ii). In fact it does not claim that the cost estimates are unreasonable, but only lack detail. This is no claim at all, but in effect a request for discovery hoping to identify a basis for a claim in the additional information supplied. The Commission has made clear, however, that a contention is not to be admitted "where an intervenor has no facts to support its position and where the intervenor contemplates using discovery or cross-examination as a fishing

expedition which might produce relevant supporting facts." 54 Fed. Reg. 33,168, 33,171 (1989) (Statement of Considerations for 1989 Amended Rules of Practice).[113]

Moreover, Confederated Tribes must provide some basis that the alleged inadequacies of the cost estimates will result in an actual shortfall of funds for the construction operation on decommissioning of the PFSF. See Yankee Atomic I, CLI-96-9, 43 NRC at 9. Because it makes no claim that the cost estimate is unreasonable, the Confederated Tribes contention fails on this account as well. Thus, this part of the subcontention must be dismissed.

(ii) Lack of Binding Agreements

Confederated Tribes also assert that "no effort has been made to show that component costs have been legally pinned down with binding agreements." Confederated Tribes Petition at 9.

This part of the subcontention must be dismissed as an impermissible challenge to agency regulation and lack of basis. The Commission's LES decision rejects this very argument. Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-97-15 ("LES"), slip op. (December 18, 1997) at 18-21. The applicable regulation requires only that an applicant show that it "has reasonable assurance of obtaining the necessary . . . funds " to cover its construction costs. 10 C.F.R. § 72.22(e) (emphasis added). The

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[113] Accord Duke Power Company (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 NRC 460, 468 (1982), vacated in part on other grounds, CLI-83-19, 17 NRC 1041 (1983). The Rules of Practice do not permit "the filing of a vague, unparticularized contention, followed by an endeavor to flesh it out through discovery against the applicant or staff.")

Commission in Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), CLI-78-1, 7 NRC 1, 19 (1978), affirmed sub nom, New England Coalition on Nuclear Pollution v. NRC, 582 F.2d 87 (1st Cir. 1978), has discussed what constitutes "reasonable assurance" in the context of financial qualifications. The Commission stated there as follows:

> "[R]easonable assurance" does not mean a demonstration of near certainty that an applicant will never be pressed for funds in the course of construction. It does mean that the applicant must have a reasonable financing plan in the light of relevant circumstances.

Seabrook, CLI-78-1, 7 NRC at 18 (emphasis added). In a similar vein the Commission has recently recognized in the context of decommissioning that the reasonable assurance standard does not require an "ironclad guarantee" or "an absolute guarantee of such funds." Yankee Atomic II, CLI-96-7, 43 NRC at 262.

Thus, contrary to Confederated Tribes' thesis, estimated costs do not need to be "legally pinned down with binding agreements" and this part of its contention must be dismissed as an impermissible challenge to a Commission rule. It must also be dismissed because, as with the part (a) of this subcontention, Confederated Tribes have provided no basis to show that the current lack of binding agreements will result in an actual shortfall of funds for the construction of the proposed ISFSI.

c) Lack of Binding Subscription Agreements

In this part of its subcontention, Confederated Tribes contend that PFS has failed to provide any subscription agreements or other legally binding commitments which give

any assurance of obtaining the necessary funding, or failed to show that the participating companies have any long term commitment to remain with the project in order to provide needed financial stability in the future.

The first part of this subcontention -- the need for legally binding subscription commitments -- must be dismissed on the same grounds as those discussed above. The contention that PFS must have "legally binding commitments" in place is an impermissible challenge to an agency regulation for the reasons previously set forth. See LES, supra. Moreover, Confederated Tribes have provided absolutely no basis to show that the current lack of binding agreements will result in an actual shortfall of funds for the construction of the proposed ISFSI.

Confederated Tribes have likewise provided absolutely no basis to support the second point of this subcontention: the claimed potential lack of financial stability in the future. Confederated Tribes have provided no "alleged facts or expert opinion" with references to "specific sources and documents" as required under 10 C.F.R. § 2.714(b)(2)(ii). Rather, their claim is based solely on pure speculation such as that found inadequate by the Commission in Yankee Atomic II, CLI-96-7, 43 NRC at 261-263. In that case, petitioners contended that decommissioning was not assured because of potential default or bankruptcy of the utility participants in the Yankee Nuclear Power Station. In rejecting this potential as a basis for admissibility of a contention, the Commission stated as follows:

> [T]he argument is based on pure speculation; Petitioners offer no evidence whatever suggesting that a Purchaser/Co-owner will either default on its obligations under the

> Purchase Contract or go bankrupt. Petitioners must submit more than this in order for a contention to be admitted for litigation.

Yankee Atomic II, CLI-96-7, 43 NRC at 261.

Thus, this subcontention must be dismissed.

d) The Service Agreements

In this subcontention Confederated Tribes contend that PFS has failed to provide any documentary evidence to show that it will be able to raise the additional $52 million of additional capital through "service agreements" with customers and that the terms of these agreements have not been provided. This subcontention must be rejected for the reasons set forth in LES, supra. This subcontention must also be rejected for both lack of specificity and lack of basis. The contention must be rejected for vagueness and lack of specificity because it fails to specify what documentary evidence PFS failed to present. Is it agreements evidencing binding agreements as alleged in subparts b and c above or some other type of documentary evidence? Thus, this subcontention must be dismissed for not containing "a specific statement of the issue of law or fact to be raised or controverted."

This subcontention must also be dismissed for lack of basis because the Confederated Tribes have provided absolutely no "alleged facts or expert opinion" with references to "specific sources and documents" as required under 10 C.F.R. § 2.714(b)(2)(ii) to challenge the adequacy of PFS's financing plans for obtaining the necessary funds to cover the estimated construction costs. As set forth by the

Commission in Yankee Atomic II, CLI-96-7, 43 NRC at 262, the legal standard for determining whether reasonable assurance has been demonstrated is whether the applicant has presented "a reasonable financing plan" for obtaining the necessary funds. Confederated Tribes have set forth no facts, expert opinion or documents on which to base a challenge to the reasonableness of PFS proposed financing plan.

In short, the Confederated Tribes have not met their "initial burden . . . to come forward with reasonably precise claims rooted in fact, documents or expert opinion in order to proceed . . . toward a hearing." Id. Therefore, this subcontention must be dismissed.

e) Cost of Lease

In this subcontention, Confederated Tribes contend that PFS has not provided any information which would show the amount to be paid to the Skull Valley Band for lease of its lands, and therefore it is unknown whether PFS has the financial capacity to meet this fundamental cost of the project. This subcontention must be dismissed because it overlooks relevant material submitted by the Applicant. The Environmental Report states that "[t]he direct costs of the PFSF include . . . annual costs associated with the Tribal lease." ER at 7.3-1. The total life-cycle cost of the facility is given as $1.536 billion. Id. Therefore, because this subcontention overlooks the fact that the cost of the lease with the Skull Valley Band has been incorporated into the total cost of the facility, it must be dismissed.

G. Incorporation by Reference of Castle Rock Contentions

In this contention Confederated Tribes seek to "adopt and incorporate by reference" five contentions of the Castle Rock petitioners for the reasons set forth in Section II.E supra, the Board should reject this contention.

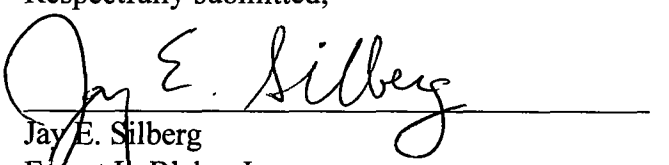
H. Incorporation by Reference of State of Utah Contentions

In this contention, Confederated Tribes seek to "adopt[ ] and incorporate[ ] by reference" the contentions and bases of the State of Utah. For the reasons set forth in Section II.E supra, the Board should reject this contention.

VIII. CONCLUSION

For the reasons set above with respect to each of the contentions, the Applicant respectfully submits that the contentions be admitted, admitted in part, or denied as appropriate.

Respectfully submitted,



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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

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

CERTIFICATE OF SERVICE

I hereby certify that copies of the Applicant's Answer to Petitioners' Contentions dated December 24, 1997 were served on the persons listed below (unless otherwise noted) by e-mail with conforming copies by U.S. mail, first class, postage prepaid, this 24th day of December 1997.

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