

February 18, 1998

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

NRC STAFF'S RESPONSE TO PETITION
OF CASTLE ROCK LAND & LIVESTOCK, L.C., SKULL VALLEY CO., LTD,
AND ENSIGN RANCHES OF UTAH, L.C. FOR NON-APPLICATION OR WAIVER
OF COMMISSION REGULATIONS, RULES, AND GENERAL DETERMINATIONS

INTRODUCTION

Pursuant to the Atomic Safety and Licensing Board's February 2, 1998, "Memorandum and Order (Memorializing Initial Prehearing Conference Directives)" (Board Order) and 10 C.F.R. § 2.758(b), the staff of the Nuclear Regulatory Commission (Staff) hereby responds to the "Petition of Castle Rock Land & Livestock, L.C., Skull Valley Co., LTD, and Ensign Ranches of Utah, L.C. for Non-Application or Waiver of Commission Regulations, Rules, and General Determinations," (Castle Rock Petition) dated January 21, 1998. For the reasons set forth below, Castle Rock's Petition should be denied.

BACKGROUND

On June 20, 1997, Private Fuel Storage, L.L.C. (Applicant) applied for a license, pursuant to 10 C.F.R. Part 72, to receive, transfer and possess power reactor spent fuel and other radioactive material associated with spent fuel storage in an independent spent fuel storage

installation (ISFSI), to be constructed and operated on the Skull Valley Indian Reservation in Tooele County, Utah. On July 31, 1997, the Commission published a "Notice of Consideration of Issuance of a Materials License for the Storage of Spent Fuel and Notice of Opportunity for a Hearing," concerning the PFS application. 62 Fed. Reg. 41,099 (1997). On or about November 24, 1997, contentions were filed by five sets of petitioners for leave to intervene in this proceeding, including Castle Rock.¹ On December 24, 1997, the Staff and the Applicant filed their responses to the petitioners' contentions. See Staff's Response to Contentions; "Applicant's Answer to Petitioners' Contentions." On January 21, 1998, Castle Rock filed the instant Petition.

During the January 26-29, 1998, initial prehearing conference, the Board directed that responses to Castle Rock's Petition would be due on February 18, 1998. The Board memorialized its directive in its February 2, 1998, Board Order.

DISCUSSION

I. Legal Standards Governing Petitions for Waiver of Commission Regulations

In general, the Commission's regulations are not subject to attack in an adjudicatory proceeding involving initial or renewal licensing. 10 C.F.R. § 2.758(a).² Section 2.758 provides,

¹ A list of the various petitioners' filings is set forth in the Staff's December 24, 1997, "NRC Staff's Response to Contentions Filed by (1) the State of Utah, (2) the Skull Valley Band of Goshute Indians, (3) Ohngo Gaudadeh Devia, (4) Castle Rock Land and Livestock L.C., et al., and (5) the Confederated Tribes of the Goshute Reservation and David Pete," at 1-2 and nn. 2-6 (Staff's Response to Contentions).

² A party must raise such challenges during the rulemaking for the proposed regulations or must petition the Commission for rulemaking under 10 C.F.R. § 2.802. See 5 U.S.C. § 553(e) ("each agency shall give an interested person the right to petition for the issuance, amendment, or repeal of a rule."); *Public Serv. Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-89-7, 29 NRC 395, 416 (1989).

however, that in certain instances a party may petition that the application of a Commission regulation be waived or an exception made for the particular proceeding. Under the framework of section 2.758, following a determination by the presiding officer that the petitioning party has made a *prima facie* case for waiver, the presiding officer must certify to the Commission a petition for waiver of a rule in an adjudicatory proceeding. 10 C.F.R. § 2.758(c) and (d). The decision to waive a rule, however, rests exclusively with the Commission. *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-89-9, 29 NRC 399, 415 (1989).

There is only one permissible ground for a petition for a waiver -- that special circumstances exist with respect to the subject matter of the proceeding such that application of the rule would not serve the purpose for which the rule was adopted. 10 C.F.R. § 2.758(b). The petition must be accompanied by an affidavit that identifies the special circumstances to justify the waiver and the specific aspects of the subject matter of the proceeding as to which application of the rule would not serve its underlying purpose. *Id.*

Special circumstances are present only if a petitioner alleges facts not in common with a large class of facilities and not considered in the rulemaking proceeding for the rule sought to be waived, either explicitly or by necessary implication. *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-88-10, 28 NRC 573, 597 (1988). Further, the special circumstances must "undercut the rationale" for the rule sought to be waived. *Id.* In addition, the Commission has recognized that a rule waiver would only be granted in "unusual and *compelling* circumstances" such that a waiver is necessary to resolve "a significant safety problem" pertaining to the rule sought to be waived. *Public Service Co. of New Hampshire*

(Seabrook Station, Units 1 and 2), CLI-89-20, 30 NRC 231, 235 (1989) (emphasis in original).³

II. Castle Rock Has Not Made a *Prima Facie* Showing For Waiver of Part 72

Castle Rock, in its Petition, seeks a determination that the Commission does not have the authority to issue a license to the Applicant under 10 C.F.R. Part 72, and that, therefore, Part 72 is inapplicable to the proceeding. Castle Rock Petition at 4. Castle Rock's overall assertion is that "[s]ince the licensing of a private, off-site 40,000 MTU facility is clearly inconsistent with the intent of the NWPA and AEA, in order to be consistent with the NWPA and AEA, 10 C.F.R. Part 72 must be interpreted not to countenance the Application for the PFSF." *Id.* at 17. Thus, Castle Rock's request constitutes a challenge to Part 72 in that Castle Rock would seek to read into Part 72 an exclusion from the authority to issue a license for the proposed facility -- an exclusion that does not exist in Part 72.

Castle Rock asserts that special circumstances exist because the application is for a private, off-site facility storing 40,000 MTU of spent fuel and because this is the first proceeding involving such a facility since the enactment of the Nuclear Waste Policy Act (NWPA). Castle Rock Petition at 4. Further, Castle Rock argues at length that special circumstances cause granting the license to be outside of the Commission's authority. *Id.* at 4-17. Castle Rock, however, has not demonstrated that the special circumstances its cites involve facts not in common with a large class

³ In its Petition, Castle Rock asserts that this requirement appears unique to the *Seabrook* proceeding, CLI-88-10, in which the rule sought to be waived inhibited safety rather than enhanced it. Castle Rock Petition at 3 n.2. Contrary to Castle Rock's position, however, the Commission in CLI-89-20 stated that this factor was "implicit in longstanding Commission law," and, therefore, it should be understood to have general applicability. *See Seabrook*, CLI-89-20, 30 NRC at 235.

of facilities and not considered (expressly or by necessary implication) in the rulemaking proceeding for Part 72. *See Seabrook*, CLI-88-10, 28 NRC at 597.

With respect to the first of the *Seabrook* factors noted above, Castle Rock has not shown that its challenge is not broadly applicable to any large privately-owned facility that involves off-site storage -- not only the proposed ISFSI. Thus, Castle Rock has not demonstrated facts not shared by a large class of facilities.

Also with respect to the first *Seabrook* factor, Castle Rock has not shown that its concerns were not considered in the rulemaking proceeding for the rule. The rulemaking proceeding did consider off-site storage by private entities. With respect to the private nature of ISFSI applicants, the Commission noted that its intent in promulgating Part 72 was "simply to have applicable regulations in place for the protection of the health and safety of the public and of the environment if applications are received for the storage of spent fuel in an ISFSI." 45 Fed. Reg. at 74,698. Further, the rulemaking for Part 72 expressly noted that if an application was received for either the General Electric--Morris, IL facility or the Allied General Nuclear Service--Barnwell, SC facility (both private entities) for use as an ISFSI, a license would be issued if the facility met Part 72 requirements.⁴ *Id.* at 74,698. In addition, section 72.14(d) contemplates an application from a private entity by distinguishing the information that must be contained in an application if submitted by an individual, partnership, corporation, or agent. Therefore, the private nature of ISFSI applicants was expressly provided for as part of the implementing rulemaking.

⁴ The Commission also noted that the Nuclear Fuel Service (DOE) West Valley, New York facility could also be licensed under Part 72 if it sought to be used as an ISFSI. 45 Fed. Reg. at 74,698.

Therefore, no special circumstances exist with respect to the application of Part 72 to the proposed facility.

Castle Rock asserts that the Commission promulgated Part 72 prior to the enactment of the NWPA and that the Commission did not consider the effect of the NWPA on its authority to license storage of spent fuel in a 40,000 MTU private, off-site ISFSI in either the initial, 1980 Part 72 rulemaking or the rulemaking for the 1988 amendments. Castle Rock Petition at 8 n.3. In large measure, the purpose of the 1988 amendments was to accommodate the licensing of the MRS as provided in the NWPA, because Part 72 was limited in scope to the storage of spent fuel and related material in an ISFSI. "Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste," 51 Fed. Reg. 19,106 (1986). The Commission stated that Part 72 prescribes the regulatory requirements for the licensing of an ISFSI "whether conducted by a nuclear facility" or the Department of Energy, or some other entity. *Id.*

In the rulemaking which culminated in the 1988 amendments, the Commission also considered the effect of Subtitle B -- Interim Storage Program -- of the NWPA by adding minor amendments to Part 72. 51 Fed. Reg. at 19,107. This consisted of changing the regulations in section 72.3(e) to clarify that the federal government was exempt from interim storage licensing by the NRC, as provided in the NWPA. *Id.* However, since the NWPA did not prohibit the licensing of private, away-from-reactor storage, the Commission had no need to alter Part 72 to achieve this result. In sum, the Commission was aware of the NWPA in amending Part 72, and, therefore, Castle Rock's argument does not raise special circumstances that would justify a waiver of Part 72.

Finally, Castle Rock's argument that the Commission does not have the authority to license

a private, away-from-reactor ISFSI does not constitute special circumstances for a waiver of Part 72.⁵ Castle Rock argues in its Petition that the Atomic Energy Act did not expressly authorize the Commission to license the storage of spent nuclear fuel. Castle Rock Petition at 7-8. Castle Rock further contends that the NWPA “expressly provides that its comprehensive scheme does not include the licensing of interim storage of spent fuel in private, off-site facilities.” *Id.* at 5. As support for its argument, Castle Rock cites *Indiana Michigan Power Co. v. United States Dep’t of Energy*, 88 F.3d 1272, 1273 (D.C. Cir. 1996) for the proposition that the NWPA is a comprehensive scheme for the interim storage and disposal of spent fuel. Castle Rock Petition at 8.⁶ While the NWPA is wide-ranging, however, it does not provide the exclusive set of provisions for the storage of spent nuclear fuel.

In *State of Idaho v. United States Dep’t of Energy*, 945 F.2d 295, 298-99 (9th Cir. 1991), *cert. denied*, 504 U.S. 956 (1992), the Ninth Circuit Court of Appeals addressed whether the NWPA applied to storage agreements that DOE had entered into prior to the enactment of the

⁵ The Staff has addressed this issue in its response to Utah’s Contention A and at the initial prehearing conference on January 27, 1998. See Staff Response to Contentions at 6-14; Tr. 55-60. The Staff argued that the Commission has the authority to license a private, away-from-reactor ISFSI, as proposed by the Applicant; that the Commission’s authority is derived from the Atomic Energy Act of 1954, as amended (AEA), which provides for the regulation of special nuclear material, source material, and byproduct material, all of which are contained in spent fuel; that the regulations in 10 C.F.R. Part 72 were promulgated as a lawful exercise of that authority; and, that the NWPA did nothing to limit the Commission’s authority to license private, away-from-reactor, fuel storage. *Id.*

⁶ Castle Rock also argues that DOE has agreed that the NWPA is the “comprehensive Congressional plan for disposal of nuclear waste.” In addition, Castle Rock asserts that the NWPA provides that its purposes are to establish a “definite Federal policy, for the disposal of . . . spent fuel.” *Id.* Castle Rock’s references to policies pertaining to spent fuel disposal, however, are not relevant to the authority of the Commission to regulate spent fuel storage.

NWPA. The court stated that the interim storage provisions of the NWPA are "not comprehensive regulations governing all federal storage of nuclear waste, but remedial legislation addressed to a specific problem." *State of Idaho*, 945 F.2d at 298-99. The Court determined that the NWPA provisions regarding interim storage are limited to contracts entered into pursuant to the NWPA. *Id.* at 299. Therefore, because the DOE agreements were not made pursuant to the NWPA, the restrictions of the NWPA did not pertain to those agreements. *Id.* Similarly, since private, away-from-reactor storage is not the subject of a NWPA contract, the provisions of the NWPA do not apply to this storage. The NWPA, therefore, does not constitute the exclusive set of provisions regarding nuclear waste storage.

In its argument, Castle Rock describes various provisions of the NWPA for the development of a permanent repository, for the DOE monitored retrievable storage facility, and for interim storage governed by Subtitle B of the NWPA. Castle Rock Petition at 9-12. In support of its assertion that Congress excluded private, away-from-reactor storage from the comprehensive program of the NWPA, Castle Rock points to 42 U.S.C. § 10155(h), a provision found in Subpart B of the NWPA. This section states:

Notwithstanding any other provision of law, nothing in this chapter shall be construed to encourage, authorize or require the private or Federal use, purchase, lease or other acquisition of any storage facility located away from the site of any civilian nuclear power reactor and not owned by the Federal Government on the date of enactment of this Act.

Neither this provision, nor the other provisions cited by Castle Rock, prohibit the licensing of private, away-from-reactor storage. In any event, this provision by its terms applies to facilities in existence on the date the NWPA was enacted and does not contain any prohibition against constructing a new, private, off-site facility. Further, this provision is consistent with Congress'

intent to relieve utilities from any requirement to construct away-from-reactor storage as a condition to entering into contracts with DOE for interim storage. As the Committee on Energy and Commerce reported, "[t]he Committee bill does not require that storage capacity at a private [away-from-reactor facility] be exhausted or unavailable before a utility would be eligible for storage capacity provided by the Secretary." H.R. Rep. No. 785, 97th Cong., 2d Sess., pt. 1, p.41. Thus, the licensing of private, away-from-reactor facilities, whether in existence in 1983 or not, is not precluded.

Castle Rock asserts that the legislative history regarding private, away-from-reactor storage is not clear or only shows that the issue was hotly contested. Castle Rock Petition at 14-15. However, as set forth above, private away-from-reactor storage was specifically considered and was not precluded. H.R. Rep. No. 785, 97th Cong., 2d Sess., pt. 1, p.41. Moreover, in enacting the NWPAs, Congress was aware from testimony of the NRC Chairman and NRC Executive Director for Operations that Part 72 contained provisions relating to the licensing of private away-from-reactor storage.⁷ Had Congress desired to prohibit the licensing of private, away-from-reactor fuel storage, it certainly could have done so in the NWPAs. Therefore, Castle Rock has not demonstrated that special circumstances exist with respect to the proposed facility that undercut the rationale for Part 72.

⁷ See Testimony of Hon. Nunzio J. Palladino, Chairman, NRC, Joint Hearings before the Committee on Energy and Natural Resources and the Subcommittee on Nuclear Regulation of the Committee on Environment and Public Works, United States Senate, 97th Cong., 1st Sess. on S.637, S.1662 (1981), at 236; see also testimony of William J. Dircks, Executive Director For Operations, USNRC, Hearings before the Subcommittee on Energy and the Environment of the Committee on Interior and Insular Affairs, House of Representatives, 97th Cong., 1st Sess. on H.R. 1993, H.R. 2800, H.R. 2840, H.R. 2881, H.R. 3809 (1981), at 325-29.

In sum, Castle Rock has not set forth a *prima facie* case for waiver of Part 72. See 10 C.F.R. § 2.758(c). Castle Rock has not shown that special circumstances exist with respect to the subject matter of the proceeding such that application of Part 72 would not serve the purpose for which it was promulgated. The special circumstances it alleges are shared by a large class of facilities and were considered (expressly and by necessary implication) in the rulemaking for Part 72. The special circumstances raised by Castle Rock do not undercut the rationale for Part 72; nor has Castle Rock demonstrated that the circumstances are "compelling" such as to involve a significant safety problem. See *Seabrook*, CLI-89-20, 30 NRC at 235. For these reasons the Board should deny Castle Rock's Petition.

III. Castle Rock Has Not Made a *Prima Facie* Showing For Waiver of 10 C.F.R. § 51.23 and the Waste Confidence Decision

A. Castle Rock's Petition to Review the Generic Determination Regarding a Repository

Rock also seeks a waiver of the Commission's Waste Confidence Decision and 10 C.F.R. § 51.23, the regulation that embodies portions of that Decision. In support of its Petition, Castle Rock asserts that unexpected, significant and pertinent events have occurred such that the Commission's Waste Confidence Decision and 10 C.F.R. § 51.23 should be revisited as part of this proceeding. Castle Rock Petition at 19. In particular, Castle Rock refers to three technical concerns: the 1992 occurrence of a 5.6 magnitude earthquake 8 miles from Yucca Mountain that caused damage to a DOE field office; the recent discovery of trace radioactive chlorine-36 produced during bomb testing that suggests fast pathways for carrying corrosive water down to the repository level; and the determination that at the Nevada Test Site, plutonium

from 1950 test explosions migrated into nearby ground water attached to small particles, suggesting that water contaminated at a repository may flow into surrounding groundwater. *Id.* at 19.

Castle Rock additionally raises several legal and policy concerns: 1) the Nuclear Waste Policy Act of 1997 will provide for construction of a centralized, federal ISFSI by 2003, which will displace the funding and the "perceived need" for a permanent geologic repository; 2) the governor of Nevada has veto rights concerning the geologic repository and has announced his opposition to it; 3) DOE has failed to meet mandatory deadlines regarding spent fuel acceptance and has expressed uncertainty as to when it can fulfill its obligations; and 4) the Yucca Mountain Project Viability Assessment, a document affecting the reasonableness of the Waste Confidence Decision, has not been completed. Castle Rock Petition at 19-20 and n.6.

The only question to be addressed is whether Castle Rock has set forth special circumstances with respect to this proceeding such that application of the Waste Confidence Decision would not serve the underlying purposes for which it was adopted. Castle Rock has not demonstrated that special circumstances exist with respect to the facility in question. First, the concerns raised by Castle Rock regarding the availability of Yucca Mountain to accept spent fuel would be common to all nuclear facilities at which spent fuel is generally being stored -- not solely the proposed ISFSI. Castle Rock states that the "unique size, scope and non-public nature" of the proposed ISFSI constitute special circumstances (Castle Rock Petition at 23); however, Castle Rock has not shown that these aspects of the proposed ISFSI create a material distinction from the common waste disposal problems affecting all facilities. *See State of Minnesota Pollution Control Agency v. United States Nuclear Reg. Comm'n*, 602 F.2d 412, 417 (D.C. Cir. 1979) (the issue

of the feasibility of nuclear waste disposal solutions is "one essentially common to all nuclear facilities"). Hence, Castle Rock's concerns regarding the unavailability of Yucca Mountain for spent fuel disposal would equally apply, regardless of size, to facilities located at the site of nuclear power reactors or away from reactors. For this reason, Castle Rock has not shown the existence of special circumstances that are not shared by a large class of facilities. See *Seabrook*, CLI-88-10, 28 NRC at 597.

In addition, in 1984, the Commission initiated its Waste Confidence rulemaking proceeding, the purpose of which was "to assess generically the degree of assurance now available that radioactive waste can be safely disposed of, to determine when such disposal or off-site storage will be available and to determine whether radioactive wastes can be safely stored on-site past the expiration of existing facility licenses until off-site disposal or storage is available." "Waste Confidence Decision," 49 Fed. Reg. at 34,658 (1984). The 1984 rulemaking was promulgated in response to the *State of Minnesota* decision, in which the D.C. Circuit Court of Appeals directed that the Commission determine whether there is reasonable assurance that off-site storage for spent fuel would be available by the time the two operating licenses at issue expired, and, if not, whether there is reasonable assurance that spent fuel could continue to be stored safely at those plants' sites. *State of Minnesota*, 602 F.2d at 418. The Court, in determining that the Commission was not required to make this determination in individual adjudicatory proceedings, agreed with the Commission that it could consider "the complex issue of nuclear waste disposal in a 'generic' proceeding such as rulemaking, and then apply its determination in subsequent adjudicatory proceedings." *Id.* at 416. The Court based its decision on the breadth of the issues involved and the predictive nature of the determination. *Id.* at 417.

The Commission, in promulgating the Waste Confidence Decision, recognized the predictive nature of its decision and the possibility of significant unexpected events which may affect it. "Waste Confidence Decision," 49 Fed. Reg. at 34,660. As a result, the Commission committed to review its decision on a periodic basis and upon the occurrence of pertinent unexpected events. *Id.* In 1990, the Commission revised its generic determination on the timing of the availability of a waste repository and the environmental impacts of storage of spent fuel. "Waste Confidence Decision Review," 55 Fed. Reg. 38,474 (1990). The Commission determined, among other things, that reasonable assurance exists that "at least one mined geologic repository will be available within the first quarter of the twenty-first century" and that sufficient capacity will be available in a repository within 30 years beyond the life of any reactor. The Commission restated its commitment to review its Decision whenever pertinent unexpected events occur, such as "a major shift in national policy, a major unexpected institutional development, and/or new technical information." *Id.* at 38,475.⁸ In sum, the underlying purpose of the Waste Confidence Decision was to provide a generic predictive determination regarding the availability of permanent spent fuel disposal and the availability of disposal capacity. Castle Rock does not set forth special circumstances which would undercut the Commission's rationale to make this determination on a recurring, generic basis, rather than as part of an individual adjudicatory proceeding in light of the complexity and generic nature of the issues involved.

In addition, Castle Rock has not set forth any technical or policy concerns which would

⁸ In its 1990 rulemaking, the Commission stated that it would review its Waste Confidence Decision every ten years, rather than every five years as provided in the 1984 rulemaking. 55 Fed. Reg. at 38,475.

require the Commission to revisit its Waste Confidence Decision earlier than as planned.⁹ With respect to technical concerns, the Commission recognized that site characterization would not proceed without difficulty and that the NRC has identified numerous issues regarding the Yucca Mountain site that will have to be resolved during site characterization. 55 Fed. Reg. at 38,486. These issues include tectonic activity, the folding and faulting of the earth's crust, at the Yucca Mountain site (*Id.* at 38,486) and the geochemical-hydrologic processes involved in interactions between "host rock, waste package, and groundwater" (*Id.* at 38,488) at that site. The Commission recognized that the site must undergo assessments relating to hydrologic, geologic, geochemical, and rock mechanics properties and that, as a result of the characterization, Yucca Mountain may not prove suitable as a repository. *Id.* at 38,493. The Commission, in its estimate, accounted for the possibility that DOE would have to suspend characterization at the Yucca Mountain site and begin activities anew at another site. *Id.* at 38,493-94. Despite the technical and policy issues surrounding the availability of a repository, however, the Commission concluded that it has reasonable assurance that at least one repository will be available within the first quarter of the twenty-first century. *Id.* at 38,495. The Commission's estimate accounted for the time it would take DOE to proceed from site screening to repository operation at a site other than Yucca Mountain, in the event that Yucca Mountain proves to be unsuitable. *Id.* at 38,495.

With respect to Castle Rock's specific concern that a 1992 earthquake near Yucca Mountain caused damage to a DOE field office, the Commission's regulations pertaining to the design criteria for the geologic repository require that structures, systems, and components

⁹ The next scheduled review is to take place in 1999. 55 Fed. Reg. at 38,500.

"important to safety" be designed to perform their necessary safety functions during the occurrence of design basis events. 10 C.F.R. § 60.131(b); *see also* 10 C.F.R. § 60.2 (definitions of "important to safety" and "design basis events"). Moreover, the Commission will not license a permanent repository if a structure whose function is important to safety would be destroyed during a design basis event. In any event, the availability of the Yucca Mountain site was not an underpinning of the Waste Confidence Decision. 55 Fed. Reg. at 38,495.

With respect to Castle Rock's concerns pertaining to groundwater pathways and groundwater contamination, the Commission's regulations for the licensing of a geologic repository provide that DOE must demonstrate compliance with the technical criteria of Part 60, including requirements for groundwater and geochemical processes, as well as system and subsystem performance requirements. The subsystem performance requirements include requirements for containment, radionuclide release, and groundwater travel time. 10 C.F.R. § 60.113. The overall system performance requirement is linked to applicable EPA requirements. 10 C.F.R. § 60.112. The site characteristics will also be evaluated to address potentially adverse conditions, such as those pertaining to groundwater and earthquakes which may compromise the ability of the repository to isolate the waste. 10 C.F.R. § 60.122(a)(2) and (c). As provided above, the Commission, in formulating its Waste Confidence Decision, did not rely on the suitability of the Yucca Mountain site.

Castle Rock raises several legal and policy issues, noted above. Regarding the assertion that the Nuclear Waste Policy Act of 1997, will provide for the construction of a large, government sponsored, centralized interim spent fuel storage facility by 2003, which will displace the funding and "perceived need" for a permanent geologic facility, the Commission addressed the issue of

funding in its Waste Confidence Decision. The Commission concluded that the long-term funding provisions of the NWPA would provide adequate financial support for the repository. 55 Fed. Reg. at 36,498. In addition, the Commission found that a mechanism for funding exists in the NWPA, with a provision for adjustments, if necessary. *Id.* at 38,506-07. The Commission recognized Congress' support in establishing milestones, advisory bodies, and responsibilities for the program. 55 Fed. Reg. at 38,507.

Even if enacted, the proposed legislation to which Castle Rock refers, the Nuclear Waste Policy Act of 1997, does not withdraw the requirements placed on DOE for the development of a geologic repository. The Senate version of the bill mandates characterization activities at the Yucca Mountain site, the preparation of an environmental impact statement, the submittal of a license application, and licensing procedures for the geologic repository. S. 104, 105th Cong., 1st Sess. § 206 (1997). Further, section 101(a) of the proposed bill provides that DOE shall develop and operate an integrated management system for the storage and permanent disposal of spent nuclear fuel and high-level radioactive waste. Likewise, the House version of the bill contains similar provisions for the site characterization of Yucca Mountain, licensing procedures, and the submission of an environmental impact statement. H.R. 1270, 105th Cong., 1st Sess. § 205 (1997). Therefore, the proposed legislation does not support Castle Rock's assertion that funding and support will not be available for the development of the geologic repository.

With respect to Castle Rock's concern that the governor of Nevada, who has veto power, has announced his opposition to Yucca Mountain, the Commission was aware of "expected and continuing State opposition" to DOE siting activities in considering its Waste Confidence Decision. 55 Fed. Reg. at 38,495. The Commission also anticipated that the State may

disapprove the recommendation that the site undergo development, but that such disapproval can be overridden by Congress. *Id.* at 38,497. The Commission found that despite the potential for State opposition, institutional arrangements are adequate to resolve State concerns in time to permit a repository to be available within the first quarter of the twenty-first century. *Id.*

With respect to Castle Rock's concern that DOE has failed to meet its deadlines, the Commission, in its Waste Confidence Decision, considered the potential for delays in DOE's program and the mandate of the NWPA to characterize only the Yucca Mountain site. Further, the Commission considered that if Yucca Mountain is not suitable, characterization would have to begin at a different site. 55 Fed. Reg. at 38,494-95. The Commission also considered DOE's history of schedular slippages since the passage of the NWPA and concluded that DOE would know by the year 2000 whether Yucca Mountain is suitable, leaving another 25 years for the development of a repository elsewhere. *Id.* at 38,495.

Finally, with respect to Castle Rock's concern that DOE's Yucca Mountain Project Viability Assessment has not been completed, the Commission styled its Waste Confidence Decision in terms of a prediction and realized that site characterization and other necessary analyses have not been completed. 55 Fed. Reg. at 38,475. Despite the fact that the information base for the repository was still under development, the Commission determined that no major breakthrough in technology would be required to develop a geologic repository at the Yucca Mountain site or elsewhere. *Id.* Further, even if the Yucca Mountain site was not chosen, the Commission considered that the experience gained during the characterization of that site would provide valuable insight into choosing an alternative location. *Id.*

In sum, Castle Rock has not made a *prima facie* case for waiver of the Waste Confidence

Decision, and, therefore, its Petition should be denied.

B. Castle Rock's Petition to Waive the Analysis Limitations in the Waste Confidence Decision

In its Petition, Castle Rock challenges the application of the environmental analysis limitations of the Waste Confidence Decision. Castle Rock Petition at 21-24. The analysis limitations in the Waste Confidence Decision are found at 10 C.F.R. § 51.23(b), which provides that an environmental impact statement or environmental report for an ISFSI is not required to contain a discussion of any environmental impact of spent fuel storage for the period following the ISFSI license term. *See also* 10 C.F.R. § 51.61. Castle Rock asserts that these analysis limitations in the Waste Confidence Decision must be waived to the extent PFS is permitted to limit its environmental impact analysis to less than 75 years, to assume that decommissioning will occur before the year 2075, and to assume that fuel stored at the ISFSI will be timely received by the permanent repository or that no more than limited amounts of fuel will remain at the ISFSI for forty years beyond its license termination. Castle Rock Petition at 21. As support for this assertion, Castle Rock states that the only site DOE can legally consider for a permanent repository is Yucca Mountain and that reports suggest that it will not be operational until 2010, or even 2023. *Id.* With respect to geologic capacity, Castle Rock states that “[a] queue has been established” for the first ten years of operation at the repository and that 7,000 MTU of the total 70,000 MTU of spent fuel will be government-generated from the Navy Nuclear Propulsion Program and similar sources. *Id.* at 21-22. Finally, once the repository is operating, it is projected to receive no more than 900 MTU of spent fuel per year. Based on these facts, Castle Rock concludes that the repository will not be able to absorb all of the PFS fuel until at least the

last quarter of the twenty-first century.

Castle Rock, however, has not set forth special circumstances with respect to the proceeding such that application of the analysis limitation of the Waste Confidence Decision would not serve the underlying purposes for which it was adopted. *See* 10 C.F.R. § 2.758(b). First, the concerns raised by Castle Rock regarding the capacity of the Yucca Mountain facility to accept spent fuel are common to a large class of both generating and storage facilities and, therefore, are not solely related to the proposed facility. *See Seabrook*, CLI-88-10, 28 NRC at 597. In addition, Castle Rock's assertions do not "undercut the rationale" for the Waste Confidence Decision capacity determination or the analysis limitation provisions of 10 C.F.R. §§ 51.23(b) and 51.61. *See id.* Nor does Castle Rock raise significant safety concerns. *See id.*

As mentioned above, the purpose of the Waste Confidence Decision was to provide a generic, predictive determination of, among other things, the timing of the availability of a geologic repository. Similarly, the analysis limitation provisions were adopted as a result of the Commission's generic determination of the environmental impacts of storage of spent fuel at fuel storage installations licensed under Part 72. *See* "Consideration of Environmental Impacts of Temporary Storage of Spent Fuel After Cessation of Reactor Operation," 55 Fed. Reg. 38,472 (1990) (as a consequence of the Waste Confidence Decision, and because the same safety and environmental considerations applied to storage in an ISFSI as in a reactor pool, the Commission decided that environmental impacts for the period following an ISFSI license need not be considered in administrative licensing proceedings regarding ISFSIs.). Castle Rock has not set forth special circumstances that undercut the rationale for the Commission's decision that such environmental impacts be resolved generically by the Commission. Further, Castle Rock's

specific concerns do not undercut the Commission's determinations undergirding the Waste Confidence Decision, primarily because the Commission considered these matters as part of its Waste Confidence rulemaking.

The Commission, in its 1984 and 1990 Waste Confidence rulemaking, considered the issue of repository capacity at Yucca Mountain. The Commission did not assume that one repository would provide sufficient capacity or that Yucca Mountain would ultimately become a repository. 55 Fed. Reg. at 38,501. The Commission recognized that the NWPAs limitation of 70,000 MTHM for the first repository will not provide adequate capacity for the total amount of spent fuel projected to be generated by all currently^h operating licensed reactors and that the NWPAs effectively places a moratorium on a second repository program until 2007-2010. *Id.* at 38,501. The Commission considered it likely that two repositories will be needed to dispose of all spent fuel unless Congress increases the 70,000 MTU limit of the initial repository and it has adequate capacity to hold all of the spent fuel. The Commission concluded that two repositories, available in approximately 2025 and 2035, each with acceptance rates of 3400 MTU per year, would provide assurance of sufficient repository capacity to dispose of the spent fuel within thirty years of reactor license expiration. *Id.* at 38,502. Finally, with respect to government-generated fuel from the Navy and other sources, the Commission recognized that DOE's spent fuel projections predicted 87,000 MTU will have been generated by the year 2036, including approximately 9,000 MTU of defense high-level waste. *Id.*

Castle Rock asserts that the Commission did not contemplate the development of a 40,000 MTU, private, away-from-reactor ISFSI when it issued the Waste Confidence Decision. Castle Rock Petition at 23. The Commission, in promulgating its 1990 Waste Confidence rulemaking,

did, in fact, recognize that potential off-site and on-site storage, of the magnitude necessary to compensate for the unavailability of a MRS, may become operational. The Commission noted that the potential impact of the uncertainty surrounding an MRS has been compensated for by "operational and planned spent fuel pool expansions and dry storage investments by utilities themselves" which had not been in operation at the time of the initial Waste Confidence Decision. *Id.* at 38,513. The Commission stated that "[i]f any offsite storage capacity is required, *utilities may make application for a license to store spent fuel at a new site.*" *Id.* at 38,513-14 (emphasis added). Finally, the Commission recognized that:

[t]he industry has made a general commitment to provide storage capacity which could include away-from-reactor (AFR) storage capacity. To date, however, utilities have sought to meet storage capacity needs at their respective reactor sites. Thus, a new industry application for AFR storage remains only a potential option, which currently seems unnecessary and unlikely.

Id. at 38,514. Thus, contrary to Castle Rock's assertion, the Commission, in the Waste Confidence Decision, did recognize the possibility of private, away-from-reactor storage which would alleviate storage needs should the MRS not become operational. Consequently, Castle Rock has not set forth any special circumstances that undermine the rationale for the Waste Confidence Rule.

Finally, Castle Rock has not shown that a waiver of the Waste Confidence Rule or its analysis limitations is necessary to address, on the merits, a significant safety problem. *See Seabrook*, CLI-89-20, 30 NRC at 235. Castle Rock asserts that the inability of the repository to absorb all the spent fuel at the proposed ISFSI will result in increased costs and an extended impact on the environment. Castle Rock Petition at 22. In addition, Castle Rock states that a shortfall of funds could lead to safety problems; in particular, Castle Rock points to an increase

in human error, cask degradation, and adverse external events. *Id.* at 23. Castle Rock has not provided sufficient support to show that its concerns are more than theoretical issues, and, therefore, Castle Rock's Petition does not sufficiently show a "compelling" safety concern. *See Seabrook*, CLI-89-20, 30 NRC at 244 (Commission requires more than a theoretical or conceivable issue -- there must be a real matter that requires resolution). Castle Rock has not demonstrated the existence of a concrete safety problem.

In sum, the Board should not certify Castle Rock's Petition to the Commission because Castle Rock has not made out a *prima facie* case for waiver of either Part 72 or the Commission's Waste Confidence Decision and related rules. Section 2.758 requires that a petition for waiver must set forth special circumstances with respect to the proceeding such that application of the rule would not serve the purposes for which it was adopted, and Castle Rock has not made that showing. The Commission has articulated, in its *Seabrook* decisions, what is required of a petitioner in showing special circumstances. Castle Rock has not satisfied the three *Seabrook* factors. Accordingly, its Petition should be denied.

CONCLUSION

For the reasons set forth above, Castle Rock's Petition should be denied.

Respectfully submitted,

Catherine L. Marco
Catherine L. Marco
Counsel for NRC Staff

Dated at Rockville, Maryland
this 18th day of February 1998

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF'S RESPONSE TO PETITION OF CASTLE ROCK LAND & LIVESTOCK, L.C., SKULL VALLEY CO., LTD. AND ENSIGN RANCHES OF UTAH, L.C. FOR NON-APPLICATION OR WAIVER OF COMMISSION REGULATIONS, RULES, AND GENERAL DETERMINATIONS" in the above captioned proceeding have been served on the following through deposit in the Nuclear Regulatory Commission's internal mail system, or by deposit in the United States mail, first class, as indicated by an asterisk, with copies by electronic mail as indicated, this 18th day of February, 1998:

G. Paul Bollwerk, III, Chairman
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555
(E-mail copy to GPB@NRC.GOV)

Dr. Jerry R. Kline
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555
(E-mail copy to JRK2@NRC.GOV)

Dr. Peter S. Lam
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555
(E-mail copy to PSL@NRC.GOV)

Atomic Safety and Licensing Board
Panel
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Office of the Secretary
ATTN: Rulemakings and Adjudications
Staff
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Office of the Commission Appellate
Adjudication
Mail Stop: 16-C-1 OWFN
U.S. Nuclear Regulatory Commission
Washington, DC 20555

James M. Cutchin, V
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555
(by E-mail to JMC3@NRC.GOV)

Jay E. Silberg, Esq.*
SHAW, PITTMAN, POTTS &
TROWBRIDGE
2300 N Street, N.W
Washington, DC 20037-8007
(E-mail copy to jay_silberg
@shawpittman.com)

Danny Quintana, Esq.*
Danny Quintana & Associates, P.C.
50 West Broadway
Fourth Floor
Salt Lake City, UT 84101
(E-mail copy to quintana
@Xmission.com)

Connie Nakahara, Esq.*
Utah Dep't of Environmental Quality
168 North 1950 West
P. O. Box 144810
Salt Lake City, UT 84114-4810
(E-mail copy to cnakahar@state.UT.US)

Diane Curran, Esq.*
Harmon, Curran & Spielberg
2001 S Street, N.W., Suite 430
Washington, D.C. 20009
(E-mail copy to dicurran@aol.com)

Jean Belille, Esq.*
Land and Water Fund of the Rockies
2260 Baseline Road, Suite 200
Boulder, CO 80302
(E-mail copy to landwater@lawfund.org)

Clayton J. Parr, Esq.*
PARR, WADDOUPS, BROWN, GEE
& LOVELESS
185 S. State St., Suite 1300
P.O. Box 11019
Salt Lake City, UT 84147-0019
(E-mail copy to karenj@pwlaw.com)

John Paul Kennedy, Sr., Esq.*
1385 Yale Ave.
Salt Lake City, UT 84105
E-mail copy to john@kennedys.org)

Professor Richard Wilson*
Department of Physics
Harvard University
Cambridge, MA 02138
(E-mail copy to
wilson@huhepl.harvard.edu)

Martin S. Kaufman, Esq.*
Atlantic Legal Foundation
205 E. 42nd Street,
New York, NY 10017
(E-mail copy to
mskaufman@yahoo.com)


Catherine L. Marco
Counsel for NRC Staff