UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

CLI-05-12

MEMORANDUM AND ORDER

The State of Utah has petitioned for review of the Licensing Board's February 24 order rejecting its proposed new contention, Utah UU (Ramifications of DOE's Refusal to Accept Fuel in Welded Canisters from the PFS Site).¹ For the reasons given below, we find the Board decision reasonable and deny the petition for review. Utah's thinly-supported new contention does not justify reopening the adjudicatory record and restarting our hearing process this late in a protracted, 8-year-old proceeding.

I. BACKGROUND

PFS proposes to use a dry storage system manufactured by Holtec corporation at the facility for which it is seeking a license. The system calls for the spent fuel to be taken from fuel

¹LBP-05-5, 61 NRC 108 (2005).

pools and sealed in a "multi-purpose canister" (MPC) at the site of the originating reactor.² The advantage of the Holtec system is that, in the short term at least, the fuel is not removed from the MPC after sealing. The MPC is loaded with fuel assemblies inside the spent fuel pool, then transferred into either a transportation cask or a storage cask, depending whether it will be stored onsite or elsewhere. The MPC contains the fuel and any byproducts, while the cask (or "overpack") provides shielding.

One goal of the PFS project was for the ISFSI to be the last stop for the spent fuel before it is sent to a permanent geological repository. The project's Final Environmental Impact Statement (FEIS) anticipated that the MPC would be used both to store the spent fuel and for transportation to the permanent repository.³ The FEIS assumed for its transportation impacts analysis that the fuel would be shipped to Yucca Mountain after leaving PFS.⁴

Neither the FEIS nor PFS's Environmental Report discussed costs, procedures, or environmental consequences of repackaging the fuel assemblies somewhere down the line after leaving the PFS facility. PFS has no plans, nor will it have the capability, to remove fuel from the MPC at its storage facility.

Recently, Gary Lanthrum, the Director of the Department of Energy's Office of National Transportation, made remarks suggesting that PFS's vision for this project was unworkable, because under its Standard Contract DOE could not accept fuel in an MPC for permanent storage. He allegedly indicated (in the words of the Board) that "PFS-stored fuel would later be

²The process is described in detail in Private Fuel Storage's Safety Analysis Report, Ch. 5, and is also described in *Private Fuel Storage*, *L.L.C* (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 132-33 (2004).

³See Final Environmental Impact Statement for the Construction and Operation of an Independent Spent Fuels Storage Installation on the Reservation of the Skull Valley Band of Goshute Indians and the Related Transportation Facility in Tooele County, Utah, NUREG-1714, (Dec. 2001), at 5-54 to 5-55.

⁴*Id*. at 5-35; 5-54.

ineligible for disposal at the proposed Yucca Mountain permanent repository, unless it was first to be unsealed and repackaged elsewhere."⁵ Utah says that the upshot of this is that the spent fuel stored at the PFS facility would have to be shipped back to either the originating reactor or some other facility for repackaging into containers acceptable to DOE prior to final disposal.

Utah's proposed Contention UU claimed that Lanthrum's remarks mean that the NRC is obliged to redo its FEIS. Utah argues, first, that the EIS should consider the costs and environmental effects of shipping spent nuclear fuel back and forth across the country three times and removing it from a welded canister. Second, Utah maintains, the FEIS should consider the consequences of creating a "dysfunctional" system of nuclear waste disposal, and whether, by approving the project, the NRC would usurp DOE's role in setting waste acceptance criteria for transportation and permanent disposal. Finally, Utah said that PFS should show financial assurances that either it or its customers can pay to repackage the fuel in a form acceptable to DOE. Utah argues that the FEIS's cost/benefit analysis would be affected considerably by the costs of shipping and repackaging the fuel.⁶

II. THE BOARD'S RULING

The Board found that PFS's rebuttal evidence – DOE documents indicating a willingness to accept PFS-type stored fuel – rendered Lanthrum's remarks insufficient to reopen the licensing hearing to consider whether spent fuel shipped to PFS will eventually have to be sent home for repackaging.

The Board cited longstanding agency practice holding that a party seeking to reopen a closed record to introduce a new issue (as opposed to additional evidence on a matter already considered) must back its claim with enough evidence to withstand summary disposition when

⁵ LBP-05-5, 61 NRC at 110.

⁶Utah proposed contention does not dispute that DOE is ultimately responsible for disposing of the spent fuel, regardless of where it is stored in the next twenty to forty years.

measured against its opponent's contravening evidence.⁷ This is in addition to the usual requirements for a well-pleaded contention and for admission of late-filed contention.⁸ The Board therefore considered numerous documents PFS submitted showing that DOE has taken the position, consistently and often, that it will accept fuel in a variety of NRC-approved storage containers at the permanent geological repository.

The Board noted that there were two possible views of the significance of Lanthrum's comments. The first is Utah's interpretation that Lanthrum was stating "a new DOE policy" of not accepting any pre-packaged, PFS-type spent fuel, "ever." The other is PFS's, that Lanthrum's statement merely described the current status of DOE's Standard Contract for Disposal of Spent Nuclear Fuel and/or High Level Radioactive Waste, which, as of now, "does not cover PFS-stored fuel," but is expected to be amended to accommodate PFS-type stored fuel.

The Standard Contract says that when DOE is ready to pick up fuel, it will send containers to the reactor site into which the operators will transfer the spent fuel.¹² The contract is silent as to what happens when the reactor operator has already removed the fuel from the spent fuel pool and into dry storage. PFS argued that despite what the Standard Contract currently provides, DOE has officially stated a position that it will modify the contract to cooperate with utilities and accept and transport a variety of packages. After considering PFS's

⁷LBP-05-5, 61 NRC at 116, citing *Vermont Yankee Nuclear Power Corporation* (Vermont Yankee Nuclear Power Station), ALAB-138, 6 AEC 520, 523-24 (1973).

⁸See 10 C.F.R. §2.714 (former rules).

⁹See LBP-05-5, 61 NRC at 118.

¹⁰See 10 C.F.R Part 961.

¹¹See LBP-05-5. 61 NRC at 117.

¹²See 10 C.F.R. §961.11.

evidence indicating that DOE has attempted to maintain flexibility with respect to possible storage cask designs, the Board concluded that the oral opinion of Lanthrum – whose "management authority ... does not appear to be in the specific area of which he spoke" – was an insufficient basis for concluding that DOE is now turning away from its longstanding policy. Hence, the Board concluded that Utah's claims did not have the factual support necessary to reopen the closed hearing record and introduce a new claim.

III. UTAH'S PETITION DOES NOT SHOW AN ERROR OF LAW OR FACT WARRANTING COMMISSION REVIEW

A. Utah Was Not Denied Procedural Fairness When Petition Deadline Was Not Extended.

As a preliminary matter, Utah claims that the Commission's refusal to extend the time for its petition for review of LBP-05-07 was unfair. The facts do not support Utah's claim of unfairness.

The Board issued its ruling rejecting Contention UU the same day it issued its merits ruling on aircraft crash hazards.¹⁴ On March 7, 2005, Utah filed a motion for reconsideration with the Board on the aircraft crash hazard ruling. The reconsideration motion did not attack the Contention UU ruling in any way. Also on March 7, Utah asked the Commission for an extension of time to file a petition for review of the aircraft crash hazard ruling until 15 days after the Board had ruled on the motion for reconsideration. Utah added that its request "would also extend the time for filing a petition for review of Contention Utah UU." The petitions for review were due on March 16.

The Secretary of the Commission has the authority to rule on procedural matters such

¹³See LBP-05-5, 61 NRC at 125.

¹⁴See Memorandum (Providing a Publicly-Available Version of Today's Board Decision on F-16 Aircraft Accident Consequences).

as motions for enlargement of time or to expand the page numbers of briefs.¹⁵ On March 11, the Secretary issued an order granting an enlargement of time with respect to review of the Board's aircraft crash hazards ruling, but declining to extend the time with respect to review of the Contention UU ruling. Utah thus had five days, including the weekend, to complete its petition for review after learning that it would not receive any additional time to file it.

This does not strike us as unfair. Utah's extension request focused on the air crash issue only and gave no reason whatever why it needed additional time to file a petition for review of the Board's ruling on Contention UU. Indeed, Utah did not even specifically ask for an extension on the Contention UU ruling, but merely assumed that extending the time for a petition for review on the aircraft crash hazards ruling would extend the petition deadline for Contention UU. There was no reason Utah could not have begun work on the petition for review between the time it filed its reconsideration motion on March 7 and the time it received word on its extension request.

In any event, Utah used the time it had available to file a well-written petition for review using the entire page allowance (15 pages). Utah does not say how it might have improved its petition or made additional arguments if it had more time. In short, Utah has shown no unfair prejudice for the partial denial of its extension request.

B. The Board Reasonably Found an Insufficient Factual Basis to Reopen the Record to Consider a New Contention.

Commission review is warranted when the petitioner demonstrates that the Board made a clear error in a finding of fact, an error of law, a prejudicial procedural error, or where the Board decision raises a "substantial and important question of law, policy or discretion." Utah argues that the Board erred in both law and fact in rejecting its contention.

¹⁵10 C.F.R. §2.772(b) (former rules).

¹⁶10 C.F.R. § 2.786(b)(4) (former rules).

The Board applied the correct standard that a party seeking to reopen a closed record to raise a new matter faces an elevated burden to lay a proper foundation for its claim.

Commission practice holds that the standard for admitting a new contention after the record is closed is higher than for an ordinary late-filed contention. The Board quoted the Appeal Board's strict *Vermont Yankee* standard for reopening the record to admit a new contention:

[T]o justify the granting of a motion to reopen the moving papers must be strong enough, in the light of any opposing filings, to avoid summary disposition. Thus, ... no reopening of the evidentiary hearing will be required if the [documents] submitted in response to the motion demonstrate that there is no genuine unresolved issue of fact.¹⁷

New information is not enough, *ipso facto*, to reopen a closed hearing record at the last minute; the information must be significant and plausible enough to require reasonable minds to inquire further.¹⁸ As our hearing rules specify, reopening requires a showing that the new information will "likely" trigger a "different result."¹⁹ Therefore the Board here correctly considered both Utah's new allegations and PFS's contrary evidence in determining whether there was a real issue at stake warranting a reopened hearing.

Utah submitted an affidavit from Dianne Neilson, Ph.D., the Executive Director of Utah's Department of Environmental Quality, concerning a conversation she had with Gary Lanthrum, the Director of DOE's Office of National Transportation. Neilson reported that Lanthrum said that "under the DOE standard contract with the nuclear industry, DOE was only required to accept bare fuel. As such, said Mr. Lanthrum, DOE would not accept spent nuclear fuel in welded canisters and DOE has no obligation to pick up fuel from the Private Fuel Storage (PFS)

¹⁷LBP-05-5, 61 NRC at 116, quoting Vermont Yankee Nuclear Power Station, ALAB-138, 6 AEC at 523-24 (1973).

¹⁸See Vermont Yankee Nuclear Power Station v. NRDC, 435 U.S. 519, 554-55 (1978). Obviously, "there would be little hope" of completing administrative proceedings if each newly arising allegation required an agency to reopen its hearings. *Id.* at 555.

¹⁹ See 10 C.F.R. § 2.734(a)(3) (former rule); see also Private Fuel Storage (Independent Spent Fuel Storage installation), CLI-04-9, 59 NRC 120, 123-26 (2004).

facility."²⁰ Because, obviously, DOE cannot intend to ship "bare fuel" across the country, Utah's second supporting document expands on what Lanthrum might have meant by his statement. An article in the *Salt Lake Tribune* quotes Lanthrum as saying "Nuclear Regulatory Commission (NRC) rules" require that "any radioactive waste heading for Yucca Mountain must be freshly packed by nuclear power plants before the DOE takes ownership of it."²¹ "The *current contracts* for how we receive fuel makes [PFS's] plan unacceptable," the article quotes him as saying.

DOE's Standard Contract apparently anticipates that the fuel is still in spent fuel pools at the originating reactor until DOE sends for it. The contract provides that DOE will send containers, suitable for use at the particular nuclear power plant,²² and the operators are responsible for packing the containers.²³ It also says that the power plants are to notify DOE 60 days prior to packing the containers in case DOE wants to observe.²⁴

The PFS plan would differ from this scheme in that DOE would be relieved of the responsibility to provide the shipping containers – the spent fuel stored at PFS would already be in containers – and DOE would not have the opportunity to observe the fuel packed prior to shipment. Of course, the system originally envisioned by the Standard Contract was defeated

²⁰State of Utah's Request for Admission of Late-Filed Contention Utah UU (Ramifications of DOE's Refusal to Accept Fuel in Welded Canisters from the PFS Site), November 12, 2004, Exhibit 1.

²¹Id. Exhibit 2.

²²See 10 C.F.R. §961.11, Article IV.B.2.

²³Id. at Article IV.A.2(a): "The Purchaser shall arrange for, and provide, all preparation, packaging, required inspections, and loading activities necessary for the transportation of [spent nuclear fuel] and [high level waste] to the DOE facility.

The contract does contemplate that the fuel may have already been moved away from the originating reactor, however: "The term *delivery* means the transfer of custody ... of spent nuclear fuel ... from Purchaser to DOE at the Purchaser's civilian nuclear power reactor or such other domestic site as may be designated by the Purchaser and approved by DOE."Id., Article I.7.

by circumstance long before Private Fuel Storage entered the picture. ²⁵ Because developing a permanent repository had taken much longer than originally contemplated, many power reactors have already removed fuel from pools to dry storage casks well before DOE is in a position to take delivery.

In opposition to Utah's contention, PFS submitted documents showing that DOE has agreed to cooperate with power reactors that could not wait for DOE before moving older fuel out of its storage pools. For example, a 2001 letter from DOE to the Sacramento Municipal Utility District concerning the Rancho Seco Independent Spent Fuel Storage Installation agreed that "the Department has previously stated its willingness to initiate the appropriate actions to include such dual-purpose storage/transport systems as acceptable waste forms under the terms of the disposal contracts." That letter said that the DOE was "in the process of" identifying necessary modifications to the contracts, including developing specifications for standard dual-purpose spent fuel canisters. The letter went on to say that the Department "continue[d] to believe in the overall benefits that may accrue to a multi-purpose storage/transport/disposal system," although it was unable to complete final design and acceptance criteria for canistered fuel. 28

PFS also included a 1996 letter from DOE, Office of Civilian Radioactive Waste

²⁵ The NWPA directed DOE to start disposing of spent fuel no later than January 31, 1998, see 42 U.S.C. §10222(a)(5)(b), leading to a great deal of litigation between DOE and the affected nuclear power reactors. See, e.g., Alabama Power Co. v. DOE, 307 F.3d 1300 (11th Cir . 2002); Wisconsin Electric Power Co. v. DOE, 211 F.3d 646 (D.C. Cir. 2000); Northern States Power Co. v. DOE, 128 F.3d 754 (D.C. Cir. 1997); Indiana Michigan Power Co. v. DOE, 88 F.3d 1272 (D.C. Cir. 1996).

²⁶See Applicant's Response to State of Utah's Request for Admission of Late-Filed Contention Utah UU, (Dec. 6, 2004), Exhibit 8 (DOE letter to Steve Redecker, SMUD, Apr. 6 2001)

²⁷ Id.

²⁸*Id*.

Management, to Yankee Atomic Electric Company that similarly indicated a willingness to modify its Standard Contract to accommodate fuel in dry storage or transport casks:

At the time [the Standard Contract] was developed ... the issue of accepting large multiple spent fuel element containers was not contemplated by the Department or utilities. Therefore, these containers are currently not identified as an acceptable waste form under the contract. However, consistent with the goals concerning minimizing spent fuel handling, once the Nuclear Regulatory Commission (NRC) has certified the NAC transport-storage system, the Department would be willing to initiate the appropriate actions to include such a system as an acceptable waste form.²⁹

Still another DOE letter, this one to the Governor of Maine, concerning the approval of the NAC Universal Storage System for spent nuclear fuel, reiterates DOE's flexibility on accepting spent fuel:

Your letter also requests that the Commission, as a pre-requisite to approval of the proposed rule, acquire binding assurances from the Department of Energy that the Department will accept spent fuel for transport and disposal that has been stored in accordance with NRC approved procedures. It is my belief that there is no need for the Commission to obtain such assurances from the Department, as they already exist under the terms of the contract for disposal that the Department has with Maine Yankee Atomic Power Company. The contract covers the acceptance, transport, and disposal of all spent nuclear fuel from the Maine Yankee reactor, regardless of the condition of the spent nuclear fuel. ³⁰

Consistent with this longstanding DOE position that the Standard Contract would be amended to provide for DOE to pick up prepackaged fuel, the proposed Yucca Mountain facility is being designed to receive fuel in dual-purpose canisters such as those to be used at PFS.

PFS provided the Board with excerpts of DOE's 2002 Final Environmental Impact Statement for Yucca Mountain, where it described procedures for dealing with commercial spent fuel in a variety of canisters.³¹ According to the FEIS, a commercial spent fuel in dual-purpose

²⁹Applicant's Response, Exhibit 7 (August 20, 1996) (emphasis added).

³⁰Applicant's Response, Exhibit 3 (May 3, 2000).

³¹See Applicant's Response to State of Utah's Request for Admission of Late-Filed Contention Utah UU, (Dec. 6, 2004), Exhibit 2, USDOE Office of Civilian Radioactive Waste Management, Final Environmental Impact Statement for a Geologic repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County,

canisters would go to an assembly transfer line that would cut off the canister lid, transfer the assemblies into a holding pool, where they could be sorted and "blended." PFS also brought to the Board's attention excerpts from the DOE Civilian Radioactive Waste Management System Requirements Document, a 2004 issuance from the DOE Office of Civilian Waste Management, showing that facilities for dealing with spent fuel in a variety of dual use canisters was a requirement for the geologic repository.³³

In the face of this rather overwhelming written record, Utah offers only the unexplained (and apparently off-the-cuff) remarks of Lanthrum, and argues that his remarks require a rethinking of fundamental assumptions about the PFS project. The Board sensibly thought differently. The Board pointed to three reasons why Lanthrum's statements did not require reopening the record and conducting further hearings. First, the Board noted, it was unclear from his remarks whether Lanthrum was merely pointing out that there are no provisions in the Standard Contract for dealing with pre-packaged fuel, or whether he literally meant that DOE intended to change its previously-expressed stance with respect to that fuel. Second, the Board pointed out that Lanthrum is outside the direct chain of command from the office in charge of setting waste acceptance policy at the DOE. Third, the Board stressed that Lanthrum's remarks were contradicted by official documents, "whose legitimacy the state has not challenged."³⁴ We see no reason to second-guess the Board's reasonable conclusion that

Nevada - Readers Guide and Summary, at 2-7, 2-21 (Feb. 2002).

³²FEIS 2-21, 2-23. Fuel blending is the process of mixing hotter fuel with cooler fuel in a disposal package to manage the total heat.

³³See Applicant's Response, Exhibit 1 ("Civilian Radioactive Waste Management System Requirements Document," U.S. Department of Energy, Office of Civilian Radioactive Waste management, DOE/RW-0406, Revision 6 (Sept. 2004)). With Yucca Mountain already being designed to accommodate canistered fuel, Utah's argument that PFS's license would preempt DOE's authority to set standards for the Geologic Repository is baseless.

³⁴LBP-05-5, 61 NRC at 117-18, 124-25.

an officially described DOE position cannot be gainsaid by informal remarks by a DOE official speaking outside his own area of direct responsibility.

In addition to not providing any official documentation that DOE has changed its policy, Utah offered no theory why DOE would have a sudden change in policy. As Utah pointed out in its proposed contention, a reversal in DOE policy at this stage would impose additional costs, both on the reactor owners and DOE itself. It is extremely unlikely that DOE would arbitrarily impose risks on the public and expenses on the waste generating utilities without a good reason for doing so. If some logistical obstacle to taking fuel in welded canisters had recently arisen, that might be a reason DOE would change its policy. But the remarks on which Utah's contention rested only referred to the terms of Standard Contract, not any newly-arisen logistical or technical impediment to accepting spent fuel in a welded canister. If there were some new development, seemingly there would be some evidence of it somewhere besides remarks from the director of the DOE's National Transportation Office. Utah has offered no such evidence.

It appears to us that the information PFS presented the Board shows that DOE has consistently both acknowledged that the Standard Contract needs modification to designate prepackaged fuel as an acceptable waste form and indicated a willingness to make any necessary modifications in the contract (consistent with the final design of the geological repository).

Utah also argues that the Board erroneously concluded that the terms of the Standard Contract were not currently binding and that this is a mistake of law on the Board's part, warranting Commission review. The State says that the Standard Contract as it currently exists, not as it could be amended, controls.³⁵ But if Utah considers the terms of the Standard

³⁵See Utah's Petition for Review, at 7-8.

Contract decisive, then its new contention is untimely by a wide margin. The provisions Standard Contract have not changed in twenty years.

The Board did not attempt to interpret the terms of the Standard Contract as to the obligations of the respective parties. This is appropriate. It is up to DOE, and possibly the courts, to interpret the law governing DOE's obligations under NWPA and the Standard Contract. The Board did not need to rule on whether DOE must take PFS fuel, as PFS claims, or is prohibited from taking PFS fuel, as Utah claims. This is because Utah did not provide sufficient evidence that DOE had reversed its previous position that it would accept prepackaged fuel and amend the Standard Contract if necessary to do so. We do not think the Board's ruling constitutes a mistake of fact or law on the relevant evidence.

In sum, we agree with the Board's decision not to reopen this case to hold a hearing on Utah's new contention. The new contention is much too thinly supported to conclude that taking it to hearing would "likely" cause a different result within the meaning of our reopening rule.³⁶

³⁶See 10 C.F.R. § 2.734(a)(3)(former rules).

IV. CONCLUSION

For the forgoing reason, we deny Utah's petition for review.³⁷

For the Commission³⁸

/RA/

Annette L. Vietti-Cook Secretary of the Commission

Dated at Rockville, Maryland this <u>20th</u> day of June, 2005

IT IS SO ORDERED.

³⁷Utah's petition for review (at pp. 14-15) also asks the Commission to initiate a rulemaking to consider how to create "a comprehensive, integrated and coherent national waste system." In its original request for admission of proposed Contention UU, however, Utah request for a new regulation apparently embraced only a requirement that funds be escrowed to cover shipments returning the spent fuel casks to the originating reactors. See State of Utah's Request for Admission of Late-Filed Contention Utah UU (Ramifications of DOE's Refusal to Accept Fuel in Welded Canisters from the PFS Site) Or in the Alternative Petition for Rulemaking, at 10. But in both its original pleading proposing Contention UU, and in its petition for review, Utah's request was too vague to satisfy our established process for seeking a rulemaking. See 10 C.F.R. §2.802. Utah is fully familiar with our rulemaking process. See Bullcreek v. NRC, 359 F.3d 536 (D.C. Cir. 2004).

³⁸ Out of an abundance of caution, Commissioner Jaczko elected to abstain from voting on this order in light of his decision not to make public statements regarding Yucca Mountain for one-year from January 21, 2005. Commissioners McGaffigan and Lyons were not present for affirmation of this Memorandum and Order. Had they been present, they would have affirmed their prior votes.