

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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COMMISSIONERS:

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In the Matter of)
)
ENTERGY NUCLEAR VERMONT YANKEE LLC)
and ENTERGY NUCLEAR OPERATIONS, INC.)
(Vermont Yankee Nuclear Power Station))
_____)

Docket No. 50-271-LR

In the Matter of)
)
ENTERGY NUCLEAR GENERATION COMPANY)
and ENTERGY NUCLEAR OPERATIONS, INC.)
(Pilgrim Nuclear Power Station))
_____)

Docket No. 50-293-LR

CLI-07-03

MEMORANDUM AND ORDER

Today we deny appeals by the Massachusetts Attorney General (Mass AG) and affirm two Atomic Safety and Licensing Board decisions rejecting his sole contention in two separate license renewal proceedings. The Mass AG proposed essentially identical contentions in the proceedings to renew the operating license at the Vermont Yankee Power Station in Windam County, Vermont¹ and the Pilgrim Nuclear Power Station in Plymouth, Massachusetts.² The Mass AG's contention says that new information calls into question previous NRC findings on the environmental impacts of fires in spent fuel pools. The Mass AG contention challenges one

¹ LBP-06-20, 64 NRC 131 (2006).

² LBP-06-23, 64 NRC __ (2006).

of the findings in the Generic Environmental Impact Statement (GEIS) for license renewal – namely that storing spent fuel in pools for an additional 20 years would have insignificant environmental impacts. In each of the challenged decisions, the Licensing Board found the contention inadmissible. Both Boards found the GEIS finding controlling absent a waiver³ of the NRC’s generic finding⁴ or a successful petition for rulemaking.⁵ We conclude that the Boards’ interpretation of the law and regulations concerning generic, or “category one,” environmental findings is consistent with *Turkey Point*⁶ and we affirm both rulings.

The Mass AG has in fact filed a petition for rulemaking raising the same issues as his contention.⁷ As he in essence acknowledges,⁸ the petition for rulemaking is a more appropriate avenue for resolving his generic concerns about spent fuel fires than a site-specific contention in an adjudication.

I. BACKGROUND

A. Environmental Analysis for License Renewal

In 1996, the Commission amended the environmental review requirements in 10 C.F.R. Part 51 to address the scope of environmental review for license renewal applications.⁹ The

³ 10 C.F.R. § 2.335.

⁴ See 10 C.F.R. § 51.53(c)(3)(i).

⁵ 10 C.F.R. § 2.802.

⁶ *Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4)*, CLI-01-17, 54 NRC 3 (2001).

⁷ See Massachusetts Attorney General’s Petition for Rulemaking to Amend 10 C.F.R. Part 51 (August 25, 2006), see 71 Fed. Reg. 64,169 (public notice).

⁸ See, e.g., Massachusetts Attorney General’s Brief on Appeal of LBP-06-20 (Oct. 3, 2006), at 8 n.7, agreeing that the Mass AG’s contention does not fit the criteria for a rule waiver. See also Massachusetts’ Petition for Rulemaking, at 18.

⁹ Final Rule, “Environmental Review for Renewal of Nuclear Power Plant Operating Licenses,” 61 Fed. Reg. 28,467 (1996).

regulations divide the license renewal environmental review into generic and plant-specific issues. The generic impacts of operating a plant for an additional 20 years that are common to all plants, or to a specific subgroup of plants, were addressed in a 1996 GEIS.¹⁰ Those generic impacts analyzed in the GEIS are designated “category one” issues. A license renewal applicant is generally excused from discussing category one issues in its environmental report.¹¹ Generic analysis is “clearly an appropriate method” of meeting the agency’s statutory obligations under NEPA.¹²

The license renewal GEIS determined that the environmental effects of storing spent fuel for an additional 20 years at the site of nuclear reactors would be “not significant.”¹³ Accordingly, this finding was expressly incorporated into Part 51 of our regulations.¹⁴ Because the generic environmental analysis was incorporated into a regulation, the conclusions of that analysis may not be challenged in litigation unless the rule is waived by the Commission for a particular proceeding or the rule itself is suspended or altered in a rulemaking proceeding.¹⁵

¹⁰ See NUREG-1437, “Generic Environmental Impact Statement for License Renewal of Nuclear Plants,” Final Report, Vol 1 (“GEIS”)(May 1996).

¹¹ 10 C.F.R. §51.53(c)(3)(i).

¹² See *Baltimore Gas and Electric Co. v. NRDC*, 462 U.S. 87, 101 (1984).

¹³ See NUREG-1427, at 6-72 to -75 (“even under the worst probable cause of a loss of spent-fuel pool coolant (a severe seismic-generated accident causing a catastrophic failure of the pool), the likelihood of a fuel-cladding fire is highly remote”), at 6-85 (in an high-density pool, “risks due to accidents and their environmental effects are found to be not significant”).

¹⁴ See 10 C.F.R. Subpt. A, App. B, Table B-1 “Summary of Findings on NEPA Issues for License Renewal of Nuclear Power Plants” (“The expected increase in the volume of spent fuel from an additional 20 years of operation can be safely accommodated on site with small environmental effects”).

¹⁵ NRC regulations do not allow a contention to attack a regulation, unless the proponent requests a waiver from the Commission. 10 C.F.R. § 2.335(a), (b); see also *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 364 (2001).

B. The Mass AG's Contention

In both license renewal proceedings before us today, the Mass AG submitted a petition for intervention and request for hearing on a single contention challenging Entergy's¹⁶ environmental report for failing to include an analysis of the long-term environmental effects of storing spent fuel in high-density pools at the site. Specifically, the Mass AG cited studies issued subsequent to the GEIS claiming that even a partial loss of water in the spent fuel pool could lead to a severe fire.¹⁷ The Mass AG argues that Entergy's failure to include the new information violated 10 C.F.R. § 51.53(c)(3)(iv)¹⁸ and raises a litigable contention:

Significant new information now firmly establishes that (a) if the water level in a fuel storage pool drops to the point where the tops of the fuel assemblies are uncovered, the fuel will burn, (b) the fuel will burn regardless of its age, (c) the fire will propagate to other assemblies in the pool, and (d) the fire may be catastrophic.¹⁹

¹⁶ Entergy Nuclear Operations, Inc., together with Entergy Nuclear Generation Company, holds the operating license for the Pilgrim Nuclear Power Station. Entergy Nuclear Operations, Inc. and Entergy Vermont Yankee, LLC, hold the license for the Vermont Yankee Nuclear Power Station. In today's decision we refer to the license applicants collectively as "Entergy."

¹⁷ See NAS Committee on the Safety and Security of Commercial Spent Nuclear Fuel Storage, *Safety and Security of Commercial Spent Nuclear Fuel Storage* (The National Academies Press, 2006); Dr. Gordon Thompson, *Risks and Risk-Reducing Options Associated with Pool Storage of Spent Nuclear Fuel at the Pilgrim and Vermont Yankee Nuclear Power Plants* (May 25, 2006); Dr. Jan Beyea, *Report to the Massachusetts Attorney General on the Potential Consequences of a Spent-Fuel Pool Fire at the Pilgrim or Vermont Yankee Nuclear Plant* (May 25, 2006).

¹⁸ In response to concerns raised by the Council on Environmental Quality and others that the NRC's generic approach in the license renewal GEIS would not take into consideration new pertinent information on environmental impacts, the NRC adopted a rule, 10 C.F.R. § 51.53(c)(3)(iv), requiring a license renewal applicant to include "new and significant information" concerning environmental effects. This information would be included in the site specific supplemental EIS (SEIS) for each power plant which is issued as part of the license renewal application review.

¹⁹ See Massachusetts Attorney General's Request for a Hearing and Petition for Leave to Intervene with Respect to Entergy Nuclear Operations Inc.'s Application for Renewal of the Vermont Yankee Nuclear Power Plant Operating License and Petition for Backfit Order Requiring New Design Features to Protect Against Spent Fuel Pool Accidents (May 26, 2006) ("VY Hearing Request") at 22; see also, Massachusetts Attorney General's Request for a

The Mass AG argued, therefore, that Entergy should have discussed consequences and mitigation of severe accidents in spent fuel pools (including those initiated by terrorist acts). In support of its claim that possible terrorist attacks increase the probability of an accident, the Mass AG pointed to the recent Ninth Circuit decision in *San Louis Obispo Mothers for Peace v. NRC*.²⁰ The Mass AG also claimed that NRC license renewal regulations require that the ER discuss severe accident mitigation alternatives for reducing the impact of a spent fuel accident, such as moving a portion of the fuel to dry storage to reduce density.²¹

The Mass AG also filed a petition for rulemaking to amend the applicable regulations. The Mass AG's petition covers somewhat broader grounds than his contention.²² It asks NRC to consider the new information on pool fire risks, "revoke the regulations that codify the incorrect conclusion" that the environmental impacts of spent fuel storage are insignificant, issue a generic determination that the impacts of high-density pool storage are significant, and "order that any NRC licensing decision that approves high-density pool storage of spent fuel" (presumably in either a license renewal proceeding or any other license amendment proceeding) be accompanied by an environmental impact statement that discusses alternatives to avoid or mitigate the impacts. It also asks that no final decision issue on the *Vermont Yankee* and *Pilgrim* license renewal proceedings until the rulemaking petition is resolved.²³

Hearing and Petition for Leave to Intervene with Respect to Entergy Nuclear Operations Inc.'s Application for Renewal of the Pilgrim Nuclear Power Plant Operating License and Petition for Backfit Order Requiring New Design Features to Protect Against Spent Fuel Pool Accidents (May 26, 2006) ("Pilgrim Hearing Request").

²⁰ 449 F.3d 1016 (9th Cir. 2006), *cert. denied*, No. 06-466 (Jan. 16, 2007).

²¹ See VY Hearing Request at 23, *citing* 10 C.F.R. § 51.53(c)(3)(iii).

²² See Massachusetts Attorney General's Petition for Rulemaking to Amend 10 C.F.R. Part 51 (August 25, 2006).

²³ See Massachusetts Attorney General's rulemaking petition at 3.

II. DISCUSSION

A. The Licensing Boards Correctly Found the Mass AG's Contention Not Admissible

1. Category One Findings Based on the GEIS Analysis Not Subject to Attack in an Individual Licensing Proceeding

Both Licensing Boards determined that this case is controlled by our ruling in the *Turkey Point* license renewal proceeding. In *Turkey Point*, a petitioner proposed to litigate the issue of the possible environmental effects of an accident involving stored fuel, including an accident resulting from an attack by the Cuban Air Force.²⁴ The Commission agreed with the Board that this contention fell outside the scope of a license renewal proceeding, which focuses on those detrimental effects of aging that are not addressed as a matter of ongoing agency oversight and enforcement.²⁵ Our *Turkey Point* decision outlined the opportunity and procedures for presenting new and significant information that could undermine the findings in the GEIS, including asking for a rule waiver or filing a petition for rulemaking to change the GEIS finding.²⁶

The Mass AG argues that *Turkey Point* is inapposite because, there, the petitioners did not argue that the license renewal applicant had violated the regulation requiring it to disclose “new and significant” information, whereas here the Mass AG does make that argument.²⁷ The Mass AG’s argument that its “new and significant information” distinguishes this case from *Turkey Point* is not convincing in light of the regulatory history of the license renewal rulemaking, as explained by the *Vermont Yankee* Board.²⁸

²⁴ 54 NRC at 5-6.

²⁵ See *id.* at 7-8, 21-23.

²⁶ See *id.* at 11-13.

²⁷ Massachusetts Attorney General’s Brief on Appeal of LBP-06-20, at 12, *citing* 10 C.F.R. § 51.53(c)(3)(iv); see note 17, *supra*.

²⁸ See LBP-06-20, 64 NRC at 157-59.

Fundamentally, any contention on a “category one” issue amounts to a challenge to our regulation that bars challenges to generic environmental findings. There are, however, procedural steps available to make such a challenge. A rule can be waived in a particular license proceeding only where “special circumstances ... are such that the application of the rule or regulation ... would not serve the purposes for which the rule or regulation was adopted.”²⁹ In theory, Commission approval of a waiver could allow a contention on a category one issue to proceed where special circumstances exist.

Here, the Mass AG does not argue that unique or unusual characteristics of the Pilgrim and Vermont Yankee facilities undermine the GEIS’s generic determinations, but instead argues that new information contradicts assumptions underlying the entire generic analysis for *all* spent fuel pools at all reactors, whether in a license renewal proceeding or not. It therefore appears that the Mass AG chose the appropriate way to challenge the GEIS when he filed his rulemaking petition. The Mass AG’s appeal, as well as his petition for rulemaking, appears to recognize as much.³⁰ It makes more sense for the NRC to study whether, as a technical matter, the agency should modify its requirements relating to spent fuel storage for all plants across the board than to litigate in particular adjudications whether generic findings in the GEIS are impeached by the Mass AG’s claims of new information.³¹ Adjudicating category one issues site-by-site based merely on a claim of “new and significant information,” would defeat

²⁹ 10 C.F.R. 2.335(b).

³⁰ See *e.g.*, Massachusetts Attorney General’s Brief on Appeal of LBP-06-20, at 8. See also Petition for Rulemaking, at 18.

³¹ The Mass AG claims that the Ninth Circuit’s decision in *San Louis Obispo Mothers for Peace v. NRC* requires admitting its spent fuel contention. But that decision – which calls on NRC to consider the environmental effects of terrorist attacks when licensing nuclear facilities – is also raised in the Mass AG’s rulemaking petition and can be considered in that context. The Ninth Circuit decision nowhere says or implies that the NRC cannot consider spent fuel pool or other environmental issues generically.

the purpose of resolving generic issues in a GEIS.

2. No Discussion of Severe Accident Mitigation Alternatives Necessary for Category One

The Boards were correct to disregard the Mass AG's argument that Entergy's environmental report was required to discuss severe accident mitigation alternatives such as reducing the density of fuel in the pool by moving some of it to dry storage.³² The Commission held in *Turkey Point* that no discussion of mitigation alternatives is needed in a license renewal application for a category one issue.³³ This makes obvious sense since "for all issues designated as category one the Commission has concluded that [generically] that additional site-specific mitigation alternatives are unlikely to be beneficial."³⁴ Both Boards found that license renewal applicants need only to discuss such alternatives with respect to "category two" issues (that is, environmental issues *not* generically resolved in the GEIS).

As we explained in *Turkey Point*, it is not necessary to discuss mitigation alternatives when the GEIS has already determined that, due to existing regulatory requirements, the probability of a spent fuel pool accident causing significant harm is remote.³⁵ The Mass AG's rulemaking petition, of course, has challenged the GEIS determination. If the NRC should find the Mass AG's concerns well-founded, then one result might be that the GEIS designation is changed and a discussion of mitigation alternatives required. Another result might be that mitigation measures already put in place as a result of NRC's post 9/11 security review could be generically determined to be adequate and consistent with the existing GEIS designation.

³² See LBP-06-20, 64 NRC at 161, LBP-06-23, slip op. at 31, 33-38.

³³ See *Turkey Point*, CLI-01-17, 54 NRC at 21-22.

³⁴ *Id.* at 22.

³⁵ See license renewal GEIS at 6-86 ("The need for the consideration of mitigation alternatives within the context of renewal of a power reactor license has been considered, and the Commission concludes that its regulatory requirements already in place provide adequate mitigation incentives for on-site storage of spent fuel"); see *also* 6-91.

B. Effect of Rulemaking Petition

The NRC posted a notice of receipt of the Mass AG's rulemaking petition on November 1, 2006, and has requested public comments by March 19, 2007.³⁶ After considering the petition and public comments, the NRC will make a decision on whether to deny the petition or proceed to make necessary revisions to the GEIS. The license renewal proceeding is not suspended during this period.³⁷ Nonetheless, depending on the timing and outcome of the NRC staff's resolution of the Mass AG's rulemaking petition, it is possible that the NRC staff could seek the Commission's permission to suspend the generic determination and include a new analysis in the Pilgrim and Vermont Yankee plant-specific environmental impact statements. This approach is described in the statement of consideration for our license renewal regulations, where the Commission noted:

b. If a commenter provides new information which is relevant to the plant and is also relevant to other plants (i.e., generic information) and that information demonstrates that the analysis of an impact codified in the final rule is incorrect, the NRC staff will seek Commission approval to either suspend the application of the rule on a generic basis with respect to the analysis or delay granting the renewal application (and possibly other renewal applications) until the analysis in the GEIS is updated and the rule amended. If the rule is suspended for the analysis, each supplemental EIS would reflect the corrected analysis until such time as the rule is amended.³⁸

³⁶ 71 Fed. Reg. 64,169; deadline for public comments extended to March 19, 2007, see 72 Fed. Reg. 24 (Jan. 19, 2007).

³⁷ The Mass AG's rulemaking petition (at p. 3) asked the NRC to withhold final decisions in the *Vermont Yankee* and *Pilgrim* license renewal proceedings until the rulemaking petition is resolved. But final decisions in those proceedings are not expected for another year or more. Those proceedings involve many issues unrelated to the Mass AG's rulemaking petition. It is therefore premature to consider suspending proceedings or delaying final decisions. NRC regulations provide that a petitioner who has filed a petition for rulemaking "may request the Commission to suspend all or any part of any licensing proceeding to which the petitioner is a party pending disposition of the petition for rulemaking." 10 C.F.R. § 2.802. An interested governmental entity participating under 10 C.F.R. § 2.315 could also make this request.

³⁸ Statement of Consideration, Final Rule, Environmental Review for Renewal of Nuclear Power Plant Operating Licenses, 61 Fed. Reg. 28,467; 28,472 (June 5, 1996).

The Commission, in short, has in place various procedures for considering new and significant environmental information. Thus, whatever the ultimate fate of the Mass AG's "new information" claim, admitting the Mass AG's contention for an adjudicatory hearing is not necessary to ensure that the claim receives a full and fair airing.

III. CONCLUSION

We find that the Licensing Boards were correct to reject the Mass AG's sole contention in the two cases, and therefore *affirm* the Boards' decisions.

IT IS SO ORDERED.

For the Commission

/RA/

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, MD
This 22nd day of January, 2007