

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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COMMISSIONERS

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Nils J. Diaz
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Edward McGaffigan, Jr.
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In the Matter of)
)
)
CONNECTICUT YANKEE ATOMIC POWER) Docket No.50-213-OLA
COMPANY)
)
(Haddam Neck Plant)
License Termination Plan))
)
)

CLI-01-25

MEMORANDUM AND ORDER

Applicant Connecticut Yankee Atomic Power Company ("CY") has asked the Commission to review a July 9, 2001 Licensing Board decision admitting intervenor Citizens Awareness Network's ("CAN's") contention 6.1 in a proceeding concerning CY's License Termination Plan for the Haddam Neck power reactor.¹ In this contention, CAN maintains that doses to children must be taken into account in determining whether residual radiation doses to the public are within regulatory limits. The Licensing Board denied CY's motion to reconsider or refer this issue for Commission review in a September 17, 2001 order.²

We find that the question presented does not meet the standards for interlocutory appellate review and deny CY's petition.

¹Connecticut Yankee Atomic Power Co. (Haddam Neck Plant), LBP-01-21, 54 NRC ___ (2001).

²Connecticut Yankee Atomic Power Co. (Haddam Neck Plant), LBP-01-25, 54 NRC ___ (2001).

I. BACKGROUND

Commission regulations require that residual radiation at a decommissioned site not exceed a total effective dose equivalent (TEDE) of 25 millirem per year to “an average member of the critical group.”³ “Critical group” is defined as “the group of individuals reasonably expected to receive the greatest exposure to residual radioactivity for any applicable set of circumstances.”⁴ “Individual” is also defined as “any human being.” The “critical group” is therefore a hypothetical person or persons who, given the range of all reasonable potential uses for the site, would receive the highest doses of radiation from living or working there. This is often found to be resident farmers, because farmers would spend the most time on the site and outdoors, and would eat food grown on the site.

The disputed contention claims that the dose modeling calculation in CY’s license termination plan is flawed because CY did not calculate doses to children. The “critical group,” CAN argues, is an entire family who might live on the site, rather than just the adult male members of such a family. Other admitted contentions attack CY’s assumptions concerning the habits of a resident farmer that would affect the radiation dose received.

Although the plain language of the regulation does not restrict the terms “critical group,” “individual” or “human being” to mean any specific age, race, or gender, CY argues that the regulation incorporated the Environmental Protection Agency’s “Reference Man” concept, which assumes a person is a white male, age 20-30.⁵ CY contends that the critical group at Haddam

³10 C.F.R. §20.1402.

⁴10 C.F.R. §20.1003.

⁵See Environmental Protection Agency, proposed “Federal Radiation Protection Guidance for Exposure of the General Public,” (“FRG”) 59 Fed. Reg. 66,414 (December 23, 1994). “These dose conversion factors are appropriate for application to any population adequately characterized by the set of values for physiological parameters ... collectively known as ‘Reference Man.’” 59 Fed. Reg. at 66,423. The FRG goes on to explain that variability in doses due to age and gender is expected to be no more than the margin of uncertainty in the

Neck should be composed of resident farmers, as CY described them in its License Termination Plan, and that the “average” member is therefore an average farmer. Doses to children are therefore irrelevant, it argues.

The Board admitted CAN’s contention that the dose modeling calculations were flawed for various reasons, including failing to take children into account, as well as several other contentions on site characterization, work scope, dose calculations, and water contamination.⁶ The Board revisited but did not reverse its ruling regarding children in its September, 17, 2001, order. Therefore, the anticipated hearing on dose calculations will examine the doses to at least two groups, resident farmers and resident children.

II. Standards for Interlocutory Review

The Commission generally disfavors interlocutory review.⁷ Our regulations prescribe strict criteria applied for review of a certified or referred ruling, which is generally reserved for those cases where the ruling:

- (1) Threatens the party adversely affected by it with immediate and serious irreparable impact which, as a practical matter, could not be alleviated through a petition for review of the presiding officer’s final decision; or,
- (2) Affects the basic structure of the proceeding in a pervasive and unusual manner.⁸

calculations, so that “a detailed consideration of age and sex is generally not necessary.” *Id.* In its Statement of Considerations in publishing its “Final Rule, Criteria for License Termination,” 66 Fed. Reg. 39,058, NRC stated that it had “evaluated” the EPA document, as well as publications from the International Commission on Radiation Protection and the National Council on Radiation Protection, and found it “reasonable and appropriate to use findings of these bodies in developing criteria for license termination to apply to its licensees.” 62 Fed. Reg. at 39,061. As in the regulation itself, the Statement of Considerations does not use the term “reference man” in its discussion of the critical group. See 62 Fed. Reg. at 39,067-68.

⁶See LBP-01-21, at 87-88.

⁷*Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), CLI-01-1, 53 NRC 1, 5 (2001); *Sequoyah Fuels Corporation and General Atomics* (Gore, Oklahoma Site), CLI-94-11, 40 NRC 55, 59 (1994).

⁸10 C.F.R. § 2.786(g). See also *Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), CLI-98-7, 47 NRC 307, 310 (1998).

A mere legal error is not enough to warrant interlocutory review because interlocutory errors are correctable on appeal from final Board decisions.⁹ Although the NRC staff supported CY's interpretation of the regulation in the proceedings below, the staff opposes CY's petition for immediate review on the grounds that the ruling will not work serious irreparable harm to CY or affect the basic structure of the proceeding in a pervasive and unusual manner.

CY does not address either of the alternative criteria for interlocutory review. Instead, it urges the Commission to immediately review the Board's ruling because of its novelty and potentially far-reaching impact. CY argues that the ruling requires a "site specific analysis of age distribution of population" in Connecticut, which potentially affects all NRC licensee sites that will be decommissioned, makes it impossible to use the NRC's RESRAD program without first selecting an adult/child ratio for the site, and destroys uniformity in dose protections.

We find these arguments unpersuasive as grounds for interlocutory review. The claimed harms are not immediate or specific to CY. The threat of future widespread harm to the general population of NRC licensees is not a factor in interlocutory review, although it might encourage the Commission to review the final decision.¹⁰ We also note that the staff's own analysis shows that there appear to be no other decommissioning sites where this ruling could have an impact before the completion of the hearing process in this case.¹¹ Finally, contrary to CY's position, the Board did not actually rule that CY must make a site-specific analysis of the age distribution of Connecticut.¹² The information in which the Board seems to be interested is

⁹See *Private Fuel Storage*, CLI-01-1, 53 NRC at 5; *Hydro Resources, Inc.*, CLI-98-8, 47 NRC 314 (1998).

¹⁰See 10 C.F.R. §2.786.

¹¹See Nuclear Regulatory Commission Staff Response to Petition for Directed Certification (Portion of LBP-01-21), at 4 (October 17, 2001).

¹²In its ruling on the motion for reconsideration, the Board noted that CY had misunderstood its earlier ruling when CY argued that the ruling would require "site specific

the dose to a hypothetical child residing on the site, not a statistical projection of how many and what ages of children will actually reside on the site.

CY additionally argues that CAN's claim will fail on the merits, because no reasonable scenario would result in a hypothetical child receiving greater doses than CY's already conservatively constituted hypothetical farmer. But if this is true, it is only an indication that CY is not seriously harmed, now or later, even if the Board's ruling is in error.

The only harm that CY might incur as a result of the Board's ruling, if it is wrong, will be an unnecessary production at a hearing of statistics on doses to a hypothetical child. But the Board has already admitted several other contentions on which a hearing is anticipated. The Commission has considered and rejected the argument that the increased litigation burden caused by the allowance of a contention has a "pervasive effect" on the structure of the litigation.¹³ We have also rejected the argument that a mere increase in the burden of litigation constitutes "serious and irreparable" harm.¹⁴ In fact, it does not appear that the information sought will necessarily broaden the scope of the hearing greatly because the closely related

averages" of the ages of the population. LBP-01-21, slip op. at 4.

¹³See, e.g., *Dr. James E. Bauer* (Order Prohibiting Involvement in NRC-Licensed Activities), CLI-95-3, 41 NRC 245 (1995) (refusal to eliminate certain bases of staff charges was not a pervasive impact); *Sacramento Municipal Utility District* (Rancho Seco Nuclear Generating Station), CLI-94-2, 39 NRC 91 (1994)(The basic structure of an ongoing adjudication is not changed simply because the admission of a contention results from a licensing board ruling that is important or novel, or may conflict with case law, policy or Commission regulations. Similarly, the mere fact that additional issues must be litigated does not alter the basic structure of the proceedings in a pervasive or unusual way so as to justify interlocutory review of a licensing board decision," (quoting *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-861, 25 NRC 129, 135 (1987))).

¹⁴ See, e.g., *Sequoyah Fuels Corporation and General Atomics* (Gore, Oklahoma Site), CLI-94-11, 40 NRC 55 (1994). "It is well established in Commission jurisprudence that the mere commitment of resources to a hearing that may later prove to have been unnecessary does not constitute sufficient grounds for an interlocutory review of a Licensing Board order." *Id.* at 61. See also *Shoreham Nuclear Power Station*, 25 NRC at 138-39; *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-858, 25 NRC 17, 21-22 (1987).

issues of the extent of radioactive contamination onsite, and the resulting doses to a resident adult, are already in dispute.

If the evidence shows, as CY claims it will, that doses to children are lower than doses to adults, CY will prevail without the need for an appeal. But even if the evidence shows that doses to children are higher, CY will still have the opportunity after the Board's final decision to argue before the Commission that our regulations prohibit considering doses to children. Because the hearing is anticipated to encompass both the doses to the resident farmer and to children, it would be simple on final appeal to determine whether the license termination plan complies with our regulations with respect to residual doses to the critical group. Any harm to CY is therefore reparable.

In seeking interlocutory review, CY points to a statement in the Commission's 1998 Statement of Policy on the Conduct of Adjudicatory Proceedings, which encouraged Boards to refer to the Commission "novel issues that will benefit from early review."¹⁵ Although this statement refers to a Board referral, the Commission may also accept discretionary interlocutory review at the request of a party in the exercise of its inherent supervisory authority where appropriate.¹⁶ But the Commission assigns considerable weight to the Board's view of whether the ruling merits immediate review. Licensing Boards are granted a great deal of discretion in managing the proceedings of cases before them.¹⁷ Generally, the Commission has accepted "novel issues that would benefit from early review" where the Board, rather than a

¹⁵*Statement of Policy on the Conduct of Adjudicatory Proceedings*, CLI-98-12, 48 NRC 18, 23 (1998).

¹⁶*Consolidated Edison Company of New York* (Indian Point, Unit 2), 16 NRC 27, CLI-82-15 (1982); *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-77-8, 5 NRC 503, 516-17 (1977); *United States Energy Research and Development Administration* (Clinch River Breeder Reactor Plant), CLI-76-13, 4 NRC 67, 75-76 (1976).

¹⁷*Baltimore Gas & Electric Company* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-19, 48 NRC 132 (1998).

party, has found such review necessary and helpful.¹⁸ Here, the Board considered whether referring this ruling to the Commission would simplify or complicate its job and concluded that immediate review was not desirable.

In addition, it is not clear that the “critical group” issue is suitable for early Commission review. Proper resolution of this issue may turn on both the fact issue of what dose the individual is reasonably expected to receive as well as the legal issue of whether our regulation restricts the “critical group” to a particular age or gender. More factual development may better inform our (or the Board’s) ultimate decision.

Seeing no compelling argument to disagree with the Board, we find that interlocutory review of this issue is not warranted at this time.

III. Conclusion

We conclude that CY’s request does not meet our standards for interlocutory review, and we deny its petition for directed certification.

IT IS SO ORDERED.

For the Commission¹⁹

/RA/

ANNETTE L. VIETTI-COOK
Secretary of the Commission

Dated at Rockville, Maryland
This 5th day of December, 2001

¹⁸See, e.g., *Private Fuel Storage LLC* (Independent Spent Fuel Storage Installation), CLI-00-13, 52 NRC 23 (2000); *Private Fuel Storage LLC* (Independent Spent Fuel Storage Installation), CLI-01-12, 53 NRC 459 (2001).

¹⁹ Commissioner McGaffigan was not present for the affirmation of this Order. If he had been present, he would have approved it.