

July 10, 2008 (8:00am)

UNITED STATES
NUCLEAR REGULATORY COMMISSION

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

ATOMIC SAFETY AND LICENSING BOARD

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

Docket No. 50-271-LR
ASLBP No. 06-849-03-LR

NEW ENGLAND COALITION, INC
SUPPLEMENTAL PREHEARING BRIEF

New England Coalition, Inc. ("NEC") submits this supplemental prehearing brief pursuant to the Board's Order of June 27, 2008.¹

I. **Issue 1A:** Does a license condition that requires the performance of certain CUFen TLAAAs after the license renewal is issued comply with the law?

No. The Nuclear Regulatory Commission (NRC) Staff's interpretation of 10 CFR §§ 54.21(c)(1) and 54.29(a) to permit a license renewal applicant to perform analyses to project TLAAAs to the end of the period of extended operation after a license is issued as an element of an aging management program pursuant to 10 CFR § 54.21(c)(1)(iii) is inconsistent with the language, structure and intent of these rules, and with NRC precedent defining the appropriate use of "conditions subsequent" to satisfy licensing requirements. The NRC Staff's interpretation of its regulations would also curtail NEC and other intervenors' hearing rights concerning issues material to the licensing decision in violation of Section 189(a) of the Atomic Energy Act, 42 USC 2239(a)(1)(A).

A. The NRC Staff's interpretation of its regulations is inconsistent with their language, structure and intent.

¹ Licensing Board Order (Regarding the Briefing of Certain Legal Issues) (June 27, 2008).

Time-limited aging analyses are defined as analyses and calculations a licensee has performed under its current license, which (1) involve time-limited assumptions defined by the current operating term, and (2) were used to make a safety determination concerning the effects of aging on systems, structures or components within the scope of license renewal. 10 C.F.R. § 54.3 (a).

Section 54.21 plainly states that a license renewal application must contain an “evaluation” of time-limited aging analyses. 10 C.F.R. § 54.21(c). The intent of this requirement is to ensure that the license renewal application contains the information the NRC needs to make findings material to its licensing decision under both its own regulations, 10 CFR § 54.29, and the Atomic Energy Act, 42 U.S.C. § 2232(a).² As the NRC explained in the preamble to Section 54.21(c) published in the Federal Register:

The Commission’s concern is that [TLAAs] do not cover the period of extended operation. Unless the analyses are evaluated, the Commission does not have assurance that the systems, structures, and components addressed by these analyses can perform their intended function(s) during the period of extended operation.

Nuclear Regulatory Commission, Nuclear Power Plant License Renewal; Revisions, Final Rule, 60 FR 22461-01, 22480-22481 (May 8, 1995).

Section 54.21(c)(1) provides that the “evaluation” of a TLAA that must be included in the License Renewal Application may consist of any one of the following three things: (1) a demonstration that the TLAA analyses are valid for the period of extended operation

² Section 54.29 provides that the Commission may issue a renewed license if it finds that “there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the [current licensing basis]. . . .” 10 CFR § 54.29(a). United States Code Section 2232(a) provides that operating licenses may be renewed only if the NRC finds that the license requirements are “in accord with the common defense and security and will provide adequate protection to the health and safety of the public.” 42 U.S.C. § 2232(a). Both the Federal Courts and the NRC have recognized that the “reasonable assurance” standard stated in 10 CFR 54.29 refers to the required degree of assurance that the “adequate protection” standard contained in the Atomic Energy Act, 42 U.S.C. § 2232(a) is satisfied. *Commonwealth Edison Co. (Zion Units 1 and 2), ALAB-616, 12 NRC 419, 421 (1980)*.

pursuant to § 54.21(c)(1)(i); (2) a projection of the TLAA analyses to the end of the period of extended operation pursuant to § 54.21(c)(1)(ii); or (3) an aging management plan pursuant to § 54.21(c)(1)(iii).³

Under this three-tiered approach, an applicant may avoid the obligation to develop an aging management plan under § 54.21(c)(1)(iii) if it satisfies § 54.21(c)(1)(i) or 54.21(c)(1)(ii) by including a demonstration that the TLAA is either valid or can be projected for the period of extended operation in the license renewal application. The validation or projection of the TLAA cannot be performed as a component of the aging management plan after the renewed license is issued. As the NRC clearly explained in the preamble to Section 54.21(c) published in the Federal Register:

The applicant for license renewal will be **required in the renewal application** to –

- (1) Justify that these analyses are valid for the period of extended operation;
- (2) Extend the period of evaluation of the analyses such that they are valid for the period of extended operation, for example, 60 years; **or**
- (3) **Justify that the effects of aging will be adequately managed for the period of extended operation if an applicant cannot or chooses not to justify or extend an existing time-limited aging analysis.**

³ Section 54.21 reads in relevant part as follows:

Each application **must contain** the following information:

- (c) An evaluation of time-limited aging analyses.
 - (1) A list of time-limited aging analyses, as defined in § 54.3, must be provided. The applicant shall demonstrate that –
 - (i) The analyses remain valid for the period of extended operations;
 - (ii) The analyses have been projected to the end of the period of extended operation; or
 - (iii) The effects of aging on the intended function(s) will be adequately managed for the period of extended operations.

10 C.F.R. § 54.21(c)(emphasis added).

Nuclear Regulatory Commission, Nuclear Power Plant License Renewal; Revisions, Final Rule, 60 FR 22461-01, 22480 (May 8, 1995)(emphasis added).

Under the NRC Staff's construction of Section 54.21(c)(1), parts 54.21(c)(1)(i) and 54.21(c)(1)(ii) collapse into part 54.21(c)(1)(iii): that is, the TLAA demonstration becomes a component of the aging management plan, instead of a means to avoid the obligation to develop an aging management plan. The Staff's construction is therefore invalid. *See*, *Kungys v. US*, 485 US 759, 788 (1988) (It is a "cardinal rule of statutory interpretation that no provision should be construed to be entirely redundant."); *DirectTV Inc. v. Hoa Huynh*, 503 F.3d 837, 853 (9th Cir. 2007) ("We must make every effort not to interpret a provision in a manner that renders other provisions of the same statute inconsistent, meaningless or superfluous," and therefore "reject DirecTV's attempt to collapse the distinction between subsections (a) and (e) [of the Federal Communications Act].").

Under § 54.29 of the NRC relicensing rules, an applicant's TLAA "evaluations" are material to the NRC's licensing decision. The Commission may issue a renewed license only after it finds that: "Actions have been identified and have been or will be taken with respect to . . . [time-limited aging analyses that have been identified to require review under § 54.21(c)], such that there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the CLB . . ." 10 C.F.R. § 54.29 (emphasis added). The use of both the past and future tense in the phrase "have been or will be taken" reflects the fact that an applicant may satisfy its obligation to "evaluate" TLAA's under Section 54.21(c)(1) with either (1) a demonstration that the TLAA is valid or can be projected for the period of extended operation (an action that "has been

taken”), or (2) describing a program it “will” implement during the period of extended operation to ensure that effects of aging “will be” adequately managed.⁴

- B. The NRC Staff’s interpretation of its regulations abridges NEC’s hearing rights in violation of the Atomic Energy Act, 42-U.S.C. § 2239(a)(1)(A).

Section 189(a) of the Atomic Energy Act (AEA) requires the NRC to grant a hearing at the request of an interested person on any material issue relevant to the licensing decision; the NRC may not exclude a material public-safety related issue from consideration by the Atomic Safety and Licensing Board. *See, Union of Concerned Scientists v. United States Nuclear Regulatory Commission*, 735 F.2d 1437 (C.A.D.C. 1984). As discussed in Part IA, above, if a license renewal applicant chooses to satisfy its obligation to “evaluate” a TLAA through a demonstration that the TLAA is valid or can be projected to the end of the period of extended operations, this demonstration is material to the NRC’s licensing decision. 10 CFR §§ 54.21(c)(1) and 54.29. The NRC Staff’s interpretation of § 54.21(c), therefore, would abridge hearing rights mandated by the AEA because it would defeat the ability of any license renewal intervenor to litigate an applicant’s TLAA methodology by allowing applicants to defer any TLAA demonstrations until after the close of ASLB proceedings.⁵

⁴ This language should not be construed in manner that would render it inconsistent with the plain language of Section 54.21, discussed above. *See, Louisiana Public Service Com’n v. F.C.C.*, 476 U.S. 355, 370 (1986) (“[W]e are guided by the familiar rule of construction that, where possible, provisions of a statute should be read so as not to create a conflict.”).

⁵ In this proceeding, the NRC Staff’s interpretation of § 54.21(c) might allow Entergy to complete its TLAA (CUFen) analyses for the core spray and reactor recirculation outlet nozzles after the license is issued, pursuant to a license condition. It might also allow Entergy to satisfy any of NEC’s concerns regarding the CUFen methodology through a licensing commitment to continued “refinement” of its analyses after the license is issued. It might allow Entergy or another applicant to rely on an aging management program in its license renewal application, but then complete analysis to validate or project a TLAA after the license is granted and suspend its aging management program. It might even be the NRC Staff’s position that a commitment to refinement of a TLAA to validate or project this analysis could constitute the entirety of an applicant’s “aging management plan” under Section 54.21(c)(1)(iii). This is unclear.

NEC further observes that intervenors have no recourse in enforcement petitions under 10 CFR § 2.206 if an applicant violates a “licensing commitment” to complete or correct analyses to project a TLAA because the NRC does not consider commitments legally binding or enforceable.⁶

- C. The NRC Staff’s interpretation of its regulations is inconsistent with NRC precedent defining the appropriate use of “conditions subsequent” to satisfy licensing requirements.

Longstanding NRC precedent provides that “minor matters” may be left to the NRC Staff for post-hearing resolution “where hearings would not be helpful and the Board can make the findings requisite to the issuance of the license.” *In the Matter of Long Island Lighting Company (Shoreham Nuclear Power Station, Unit 1)*, ALAB-788, 20 NRC 1102, 1159 (1984). The Staff’s post-hearing role should be “ministerial,” and should not involve “overly complex” or “discretionary” judgments on legal or factual issues. *In the Matter of Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation)*, CLI-00-13; 52 N.R.C. 23, 34 (2000); *See also, In the Matter of Southern California Edison Company, et. al. (San Onofre Nuclear Generating Station, Units 2 and 3)*, LBP-82-39, 15 N.R.C. 1163, 1216, 1217 (1982) (NRC Staff could properly determine whether public information should be printed in Spanish and confirm the delivery of emergency equipment, but further hearings were required concerning the adequacy of medical services to be made available to the public).

⁶ *See, In the Matter of FirstEnergy Nuclear Operating Company (Davis-Besse Nuclear Power Station, Unit 1)*, DD-04-01, Director’s Decision Under 10 CFR 2.206 (April 22, 2004) at 27 (“Petitioner’s request for enforcement based solely on failure of the licensee to complete commitments represents a misinterpretation of the agency’s enforcement policies regarding commitments. As stated earlier, reasonable assurance of adequate protection of public health and safety is, as a general matter, defined by the Commission’s health and safety regulations themselves. In most cases, the agency cannot take formal enforcement actions solely on the basis of whether licensees fulfill commitments, as failure to meet a commitment in itself does not constitute a violation of a legally binding requirement.”).

A license condition or commitment must not affect “an improper delegation of decisional responsibility over adversary issues from the Board to the staff.” *In the Matter of Long Island Lighting Company (Shoreham Nuclear Power Station, Unit 1)*, 20 NRC at 1160. Fundamentally:

[T]he mechanism of post-hearing resolution must not be employed to obviate the basic findings prerequisite to an operating license – including a reasonable assurance that the facility can be operated without endangering the health and safety of the public. In short, the ‘post-hearing’ approach should be employed sparingly and only in clear cases. In doubtful cases, the matter should be resolved in an adversary framework prior to issuance of license, reopening the record if necessary.

In the Matter of Consolidated Edison Company of New York, Inc. (Indian Point Station, Unit No. 2), CLI-74-23, 7 A.E.C. 947, 950-52 (1974).

Under the NRC Staff’s interpretation of § 54.21(c), completion or correction of an applicant’s analyses demonstrating that a TLAA is valid through the period of extended operations or has been projected to the end of this period can be required as a condition subsequent to the license. The NRC Staff’s post-ASLB hearing review of the applicant’s methodology could not be considered “minor” or “ministerial,” and certainly would involve the determination of complex issues and the exercise of significant discretion.

The validity of an applicant’s TLAA methodology is a complex issue material to the licensing decision and the NRC’s prerequisite finding that there is reasonable assurance the facility can be operated without endangering public health and safety. It therefore should be reviewed on the record before the ASLB.

II. Issue 1B: Is it legally permissible under 10 C.F.R. § 54.29 to issue a license renewal even though certain of the TLAAs have not been performed?

As discussed in Part I, above, 10 CFR § 54.21(c) requires that a license renewal application must contain an “evaluation” of TLAAs, and that evaluation may constitute either (1) a demonstration that the TLAA analyses are valid for the period of extended operation; (2) a demonstration that the TLAA analyses have been projected to the end of the period of extended

operation; or (3) a demonstration that the effects of aging will be adequately managed (ie, an aging management plan). Under 10 C.F.R. § 54.29, the NRC may not approve a license renewal until it finds that the applicant's TLAA "evaluations" provide reasonable assurance of public health and safety.

An applicant may choose to rely on an aging management plan pursuant to Section 54.21(c)(1)(iii), rather than demonstrating the validity or projection of a TLAA under Sections 54.21(c)(1)(i) or 54.21(c)(1)(ii). In this instance, the NRC may approve a license renewal although TLAA demonstrations have not been performed. An applicant should not be permitted, however, to rely on an aging management program in its license renewal application, but later perform a TLAA demonstration and suspend the aging management program. This practice would clearly improperly circumvent intervenors' hearing rights regarding the TLAA methodology.

III. Issue 2: Does a renewal application that contains a short written description of an aging management program that lacks content or details but instead states that it is "comparable to" and "based on" the relevant sections of NUREG-1801 or EPRI NSAC-202L, "demonstrate that the effects of aging will be adequately managed" as required by 10 C.F.R. §§ 54.21(a)(3) and 54.21(c)(1)(iii)?

A. References to NRC Staff or industry guidance do not describe a license renewal applicant's aging management plans in sufficient detail.

The description of an aging management program contained in a license renewal application must be sufficiently specific to permit an interested person and/or intervenor to understand and rigorously evaluate the content and likely effectiveness of that program. Statements that a program will be "based on" NRC or industry guidance documents that themselves provide only general instructions are not sufficient. NRC precedent requires much more detail than this:

Accordingly, Part 54 requires renewal applicants to demonstrate how their programs will be effective in managing the effects of aging during the proposed period of extended operation. *See generally* 10 C.F.R. § 54.21(a). This

is a detailed assessment, conducted at “a component and structure level,” rather than at a more generalized “system level.” 60 Fed. Reg. at 22,462. License renewal applicants must demonstrate that all “important systems, structures, and components will continue to perform their intended function in the period of extended operation.” Id. at 22,463. Applicants must identify any additional actions, i.e., maintenance, replacement of parts, etc., that will need to be taken to manage adequately the detrimental effects of aging. Id. Adverse aging effects generally are gradual and thus can be detected by programs that ensure sufficient inspections and testing. Id. at 22,475.

In the Matter of Florida Power and Light Company (Turkey Point Nuclear Generating Plant), CLI-01-17, 54 NRC 3, 8 (2001); *See also*, Nuclear Regulatory Commission, Nuclear Power Plant License Renewal; Revisions, Final Rule, 60 FR 22461-01, 22479 (May 8, 1995) (“[T]he [Integrated Plant Assessment required by 10 CFR 54.21(a)] must contain a demonstration, for each structure and component subject to an aging management review, that the effects of aging will be managed so that the intended function(s) will be maintained for the period of extended operation. This demonstration must include a description of activities, as well as any changes to the CLB and plant modifications that are relied on to demonstrate that the intended function(s) will be adequately maintained despite the effects of aging in the period of extended operation.”).

- B. An applicant’s demonstration that an aging management program conforms to NRC Staff or industry guidance is not dispositive of whether this program satisfies the “reasonable assurance” standard under NRC regulations and the Atomic Energy Act.

“Agency interpretations and policies are not ‘carved in stone’ but must rather be subject to re-evaluation of their wisdom on a continuing basis.” *Kansas Gas and Electric Co. (Wolf Creek Generating Station, Unit 1)*, 49 NRC 441, 460 (1999), *citing*, *Chevron USA, Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 863-64 (1984)).

The GALL report does not contain legally binding regulatory requirements. The Summary and Introduction to NUREG-1801, Vol. 1 includes the following explanation of its legal status:

Legally binding regulatory requirements are stated only in laws; NRC regulations; licenses, including technical specifications; or orders, not in NUREG series publications.

* * *

The GALL report is a technical basis document to the SRP-LR, which provides the Staff with Guidance in reviewing a license renewal application . . . The Staff should also review information that is not addressed in the GALL report or is otherwise different from that in the GALL report.

NUREG-1801, Vol. 1, Summary, Introduction, Application of the GALL Report.

Although NUREG-1801 and other NRC guidance documents are treated as evidence of legitimate means for complying with regulatory requirements, the NRC Staff must prove the validity of its guidance if it is contested by an intervenor.

[NUREGs] do not rise to the level of regulatory requirements. Neither do they constitute the only means of meeting applicable regulatory requirements. . . . Generally speaking, . . . such guidance is treated simply as evidence of legitimate means for complying with regulatory requirements, and the staff is required to demonstrate the validity of its guidance if it is called into question during the course of litigation.

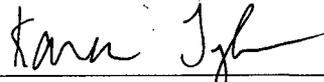
In the Matter of Carolina Power & Light Company and North Carolina Eastern Municipal Power Agency (Shearon Harris Nuclear Power Plant), 23 NRC 294 (1986), citing, Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit 1), 16 NRC 1290, 1298-99 (1982) (emphasis added); See also, In the Matter of Connecticut Yankee Atomic Power Company (Haddam Neck Point), 54 NRC 177, 184 (2001), citing, Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), 28 NRC 288, 290 (1988) (“NUREGs and similar documents are akin to ‘regulatory guides.’ That is, they provide guidance for the Staff’s review, but set neither minimum nor maximum regulatory

requirements.”); *In the Matter of Private Fuel Storage, LLC*, 57 NRC 69, 92 (2003) (“[A]n intervenor, though not allowed to challenge duly promulgated Commission regulations in the hearing process. . . is free to take issue with . . . NRC Staff guidance and thinking . . .”).

June 9, 2008

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**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

Before the Atomic Safety and Licensing Board

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Entergy Nuclear Vermont Yankee, LLC)
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)
)

CERTIFICATE OF SERVICE

I, Christina Nielsen, hereby certify that copies of NEW ENGLAND COALITION, INC.'S SUPPLEMENTAL PREHEARING BRIEF in the above-captioned proceeding were served on the persons listed below, by U.S. Mail, first class, postage prepaid; and, where indicated by an e-mail address below, by electronic mail, on the 9th of July, 2008.

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