RAS H-377

UNITED STATES
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In Re: Entergy Nuclear Vermont Yankee)	**Docket No. 50-271-LR**
LLC and Entergy Nuclear)	**ASLBP No. 06-849-03-LR**
Operations, Inc.)	**(License Renewal)**
(Vermont Yankee Nuclear Power Station)	

VERMONT DEPARTMENT OF PUBLIC SERVICE OPPOSITION TO PETITION FOR REVIEW OF PARTIAL INITIAL DECISION LBP-08-25

INTRODUCTION

Only one party to date, the NRC Staff (Staff), has filed a Petition for Review (Petition or Pet.) of the Partial Initial Decision , LBP-08-25. The Petition attempts to create the appearance that the Board's decision is at odds with Commission precedent and regulations but, as shown below, the Petition is nothing more than 1) a disagreement about the meaning of certain words and phrases, meanings which do not change the application of the regulations to the proposed license renewal application in this, or any other case and 2) an attempt to overturn longstanding and well-founded Commission and court decisions regarding the obligation to definitively resolve all relevant, significant and properly raised safety issues in the hearing process established by the Commission for license renewal.

THE BOARD UNDERSTOOD AND PROPERLY APPLIED THE RELEVANT REGULATIONS

The Petition for Review (Petition or Pet.) is based, in part, on the premise that the three members of Atomic Safety and Licensing Board, after carefully reviewing thousands of pages of exhibits and legal pleadings, including full briefing of the issue which is the subject of the

Template Secy-037

DS-03

Petition, and a week of hearings, basically misunderstood the most fundamental concepts about time-limited aging analyses (TLAA), cumulative use factors (CUF), environmental conditions that must be included in calculating cumulative use factors (CUFen) and the legal obligations of applicants seeking an operating license. In fact, the Board noted that its view of those concepts was, in many instances, supported by NRC Staff's own writings and actions. Thus, the Petition for Review is an attempt by Staff to recant its own admissions of fact and law, a task with which it struggles throughout the Petition.

For example, when it was noted by the Board that Staff considered that CUFen calculations must be performed prior to issuance of a license renewal, as expressed in summaries of phone conversations between Staff and Applicant (LBP-08-25 at 17, 59), Staff offers "[t]his summary was selected by the intervenor from over thirty telephone conference summaries and represents a snapshot in time of an evolving process" (Pet. at 16, n. 37) and when the Board noted that Staff, while arguing that CUFen calculations are not part of the TLAA analysis, included CUFen calculations as part of the TLAA analysis in its SER (LBP-08-25 at 60, 65) Staff offers "the format and structure of an SER are not interpretive evidence of the intent and applicability of the Commission's regulations" (Pet. at 17).

Staff's attempt to recant its admissions on these issues is curious since the Commission itself, in a recent opinion, confirms the basic theses that the Petition seeks to challenge. In *Amergen Energy Company, LLC* (License Renewal for Oyster Creek Nuclear Generating Station) Docket No. 50-219-LR, CLI-08-28, the Commission discusses the CUF and CUFen issues and their role in the license renewal process. As did the Board here, the Commission considers the CUFen calculation to be a part of the TLAA process and to be relevant to license renewal:

> In the license renewal context, our regulations, at 10 C.F.R. §§ 54.33 and 54.35, require that the regulations established under 10 C.F.R. Part 50, including compliance with the ASME Code, be followed during the period of extended operation. This means that the cumulative usage factor for a component should not exceed 1.0, even including additional cyclic loading that may occur during the period of extended operation.
>
> ***
>
> 10 C.F.R. § 54.21(c)(1), which lists the technical information that must be contained in a license renewal application, requires license renewal applicants to include *an evaluation of TLAAs that demonstrates at least one of the following*:
>
> > (i) The analyses remain valid for the period of extended operation;
> > (ii) The analyses have been projected to the end of the period of extended period of operation; or
> > (iii) *The effects of aging on the intended function(s) will be adequately managed for the period of extended operation.*
> >
> > ***
>
> For applicants choosing to demonstrate compliance with 10 C.F.R. § 54.21(c)(1)(ii), the SRP directs the Staff to apply the following criterion:
>
> > The [cumulative usage factor] calculations have been reevaluated based on an increased number of assumed transients to bound the period of extended operation. The resulting [cumulative usage factor] remains less than or equal to unity [1.0] for the period of extended operation.
>
> *In addition to the regulatory requirement that the cumulative usage factor not exceed 1.0, the Staff guidance suggests that the cumulative usage factor be adjusted to account for the fact that the fatigue life of components in an operational environment (e.g., exposure to reactor coolant) may be less than predicted by the ASME Code, where fatigue life was measured in a controlled laboratory setting.*

Id. at 6-8 (footnotes omitted , emphasis added). Thus, contrary to Staff's view of the obligations imposed upon an applicant, the Commission acknowledges, as the Board found, that the TLAA analysis includes *demonstrating* that an aging management plan (AMP) will address those issues which aging calculations demonstrate may arise and that a CUFen calculation is part of the analysis required under 10 C.F.R. § 54.21(c)(1)(ii). The fact that the environmental factors are added to the CUF analysis required as part of the continuing licensing basis (CLB) for purposes

of license renewal does not, as the Staff asserts, remove the CUFen calculations from the TLAA.[1] Nor does the fact that an applicant has committed to implement an AMP, absolve the applicant of the obligation to conduct a proper CUFen analysis as a prerequisite to designing the appropriate AMP. Without the CUFen analysis, identifying which, if any, components will have a CUFen in excess of 1.0 and at what point in their operating history that is likely to occur, the parameters of the AMP monitoring cannot be determined and an applicant would not be able to demonstrate that it has a technically acceptable AMP.[2]

The Standard Review Plan (SRP) NUREG 1800, includes calculation of the CUFen as part of the development of the AMP:

> However, the calculations supporting resolution of this issue, which included consideration of environmental effects, indicate the potential for an increase in the frequency of pipe leaks as plants continue to operate. Thus, the staff concluded that licensees are to address the effects of coolant environment on component fatigue life as aging management programs are formulated in support of license renewal.

Id. at Section 4.3.1.2. Staff guidance as to the type of program that will be acceptable as an AMP for metal fatigue of the reactor coolant pressure boundary identifies the need to conduct baseline and periodic CUFen calculations of the components in the AMP. Generic Aging Lessons Learned Report (GALL)X.M1 at X M-1 ("The sample of critical components can be evaluated by applying environmental life correction factors to the *existing ASME Code fatigue analyses* . . .

---

[1] The addition of the environmental factors to the CUF calculations under the CLB would apparently necessitate application of 10 CFR § 50.109 and the Staff has decided a backfit is not warranted. *See* NUREG/CR-6260 and SECY-95-245.

[2] Including a CUFen analysis as part of the AMP does not "collapse" § 54.21(c)(1)(ii) into § 54.21(c)(1)(iii) (Pet. at 18) since the former remains an option where an applicant does the calculation and demonstrates that the CUFen is acceptable thus avoiding the need for an AMP.

The program provides for periodic update of the fatigue usage calculations" (Emphasis added)).

In addition, incorporation by reference of guidance from GALL or any other regulatory guide may only occur "provided that the references are clear and specific." 10 C.F.R. § 54.17(e). The SRP allows credit for GALL only if an applicant ensures:

> that the plant program contains all the elements of the referenced GALL Report program. In addition, the conditions at the plant must be bounded by the conditions for which the GALL Report program was evaluated.

SRP at 3.0.1. Section X.M1 is not a specific program and does not have clear guidance. If a mere promise to include unspecified elements, without the specifics of the AMP or CUFen calculations to be used, were sufficient, there would be no need for the SRP admonition.

The Petition often repeats a single phrase, out of the context in which it was made, where the Commission acknowledged that, if an application for license renewal is submitted and if the applicant commits to follow the guidance in GALL, that will be sufficient evidence to establish reasonable assurance of compliance with the licensing requirements. *See AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station) et al.,* CLI-08-23, 68 NRC ___ slip op. at 6 (Oct. 6, 2008). However, the Commission was describing what is a satisfactory minimum that an application must meet, not that the mere assertion of an intent to comply with GALL would remove from consideration a challenge by an intervenor, based upon, among other theories, the theory that there is insufficient detail in the GALL commitment for applicant to "demonstrate" that it will have an adequate AMP. In addition, as Staff is well-aware, GALL is a guidance document and compliance with it does not foreclose a challenge to the adequacy of the GALL approved program anymore than failing to comply with the GALL approved program is sufficient to demonstrate that an application is deficient. In its opposition to Contentions filed by Vermont

in the VY uprate proceeding, Staff offered the following:

> Staff regulatory guides are not regulations and do not have the force of regulations. An applicant is free to rely on a regulatory guide, but may take alternative approaches to meet applicable legal requirements. See *Curators*, CLI-95-8, 41 NRC at 397. Therefore, the assertion in Basis 3 of failure to comply with a regulatory guide is, without more, inadequate to meet NRC contention pleading requirements. See *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), LBP-91-35, 34 NRC 163, 179 (1991).

Entergy Nuclear Vermont Yankee, LLC and *Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station) Docket No. 50-271-OLA, NRC Staff Answer to Vermont Department of Public Service Notice of Intention to Participate and Petition to Intervene (September 29, 2004) at 12. *See also Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Power Station), CLI-74-40, 8 AEC 809, 811 (1974); *Consumers Power Co.* (Big Rock Point Nuclear Power Plan), ALAB-725, 17 NRC 562, 568 n. 10 (1983). Thus, at most, Applicant's commitment to comply with the GALL provision related to metal fatigue, satisfies the Staff but does not and cannot prevent the Board from reviewing the substance of the commitment and to explore any deficiencies alleged in that commitment to the extent they are raised by an intervenor.

Thus, although the Petition attempts to package the Board decision as full of errors in its interpretation and application of the Commission regulations, in fact the Board decision is fully consistent with Commission decisions and Staff guidance on these subjects and properly applies the Commission regulations. Those parts of the Petition are nothing more than a semantic squabble which contains no substance and the resolution of which has little impact on the actual work of the Commission. Whether the CUFen analysis is part of the TLAA or not, as the Commission made clear in *Oyster Creek* (CLI-08-28), the adequacy of that calculation is a safety issue which should be resolved in the license renewal process, if properly raised. Whether the

AMP concept approved by GALL is part of the TLAA analysis (it is listed under 10 CFR § 54.21(c)(1) as one of the items an applicant "must demonstrate" as part of the "list of time-limited aging analyses, as defined in §54.3, [which] must be provided") a determination of whether an applicant has made the required "demonstration" is an issue which, if properly raised, must be resolved in the license renewal proceeding. There is no compelling reason for the Commission to review how the Board and Staff may differ over the labeling of issues if it is apparent the issues are part of what must be evaluated in a license renewal proceeding.

ALL SIGNIFICANT AND RELEVANT SAFETY ISSUES, THAT HAVE BEEN PROPERLY RAISED, MUST BE RESOLVED BY THE ASLB

The Petition raises a second issue, the resolution of which could have a profound impact on license renewal and reactor safety. However, that issue has been long resolved by the Commission and the Petition offers no reason for its reconsideration. The issue is whether significant safety questions regarding compliance with license renewal requirements can be removed from consideration by the Board and the public by the simple expedient of Staff and applicant agreeing to resolve the issue after the license renewal has been approved.

Long-standing NRC precedent confirms that key safety issues must be resolved in the hearing itself, not post-hearing by Staff. *Waterford Steam Electric Station,* Unit 3, ALAB-732, 17 NRC 1076, 1103 (1983), citing *Consolidated Edison Co.* (Indian Point Station, Unit No. 2), CLI-74-23, 7 AEC 947, 951-952 (1974)(("[b]ut the 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. 10 CFR 50.57. 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 licenses, reopening hearings if necessary"); *accord, Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Units 1 & 2), ALAB-298, 2 NRC 730, 736-37 (1975); *Washington Public Power Supply System* (Hanford No. 2 Nuclear Power Plant), ALAB- 113, 6 AEC 251, 252 (1973); *Commonwealth Edison Co.* (Byron Nuclear Power Station, Units 1 & 2), LBP-84-2, 19 NRC 36, 210 (1984), *rev'd on other grounds*, ALAB-793, 20 NRC 1591, 1627 (1984); *Philadelphia Electric Co.* (Limerick Generating Station, Units 1 & 2), ALAB-836, 23NRC 479, 494 (1986); *Public Service Co. of Indiana, Inc.* (Marble Hill Nuclear Generating Station, Units 1& 2), ALAB-461, 7 NRC 313, 318 (1978)(Board delayed issuance of a construction permit so it, and not a post-hearing Staff review, could resolve a safety issue). In rare instances, a commitment to take action in the future may, in and of itself, be sufficient but the parameters of the commitment being made must be clear and the issue cannot be a central safety question. Thus, a commitment to obtain financial security subsequent to a licensing decision, after full Board review of a model financial contracting instrument, as occurred in *Private Fuel Storage LLC* (Independent Spent Fuel Storage Installation), CLI-00-13, 52 NRC 23, 29-30 (2000) has been approved. *Private Fuel Storage* merely confirms the difference between this case and those rare instances in which the Commission allows a post-licensing condition in lieu of Board resolution of the issue. The post hearing approach should be employed sparingly and only in clear cases, for example, where minor procedural deficiencies are involved. *See e.g. Louisiana Power & Light Co. (Waterford Steam Electric Station, Unit 3)*, ALAB-732, 17 NRC 1076, 1103 (1983), citing *Consolidated Edison Co. (Indian Point Station, Unit No. 2)*,

CLI-74-23, 7 AEC 947, 951 n.8, 952 (1974).

These Commission precedents implement the holding of the United States Supreme Court in *Power Reactor Development Co. v. International Union of Elec., Radio and Mach. Workers, AFL-CIO*, 367 US. 396, 397 (1961). The Court held that although definitive findings on all relevant safety issues do not need to be made as a precondition to approval of a construction permit "[i]t is clear from this provision [42 U.S.C. § 2232(a)] that before licensing the operation of PRDC's reactor, the AEC will have to make a positive finding that operation of the facility will 'provide adequate protection to the health and safety of the public.'"); *see also Union of Concerned Scientists v. NRC, 735 F.2d 1437, 1451 (D.C. Cir.1984), cert. denied*, 469 U.S. 1132 (1985) (holding that material licensing issues may not be excluded from a licensing hearing).

What is at issue in this proceeding is the grant of a new operating license for VY authorizing its operation for an additional twenty years. Pursuant to 10 C.F.R. § 54.31, what Entergy would receive, if its application were approved, is a new operating license with a term equal to twenty years plus the remaining years on its existing license, and the existing license would end on the date a renewed license is issued. Thus, this is an operating license proceeding subject to all requirements applicable to such proceedings. Although the Commission has narrowed the scope of issues that are to be resolved in relicensing hearings, it has not loosened the Atomic Energy Act obligation to provide a hearing for resolution of all relevant, properly raised, safety issues. Staff claims that no hearing is required. Rather, it asserts that an applicant's promise to take certain steps, not spelled out in any detail, and that will be monitored by Staff, is sufficient, thus eviscerating the hearing right guaranteed by 42 U.S.C. §2232(a).

Even Staff does not claim that a mere promise to do certain aging analysis calculations

and develop the details of an AMP program is sufficient to meet the requirements for license renewal since Staff specifically reserves for itself the right to review the calculations once they are conducted and the AMP once it is submitted. If all that were required were the general commitment to do the required analyses, no reason would exist for NRC Staff to review what Entergy will be doing. Staff does not want to eliminate a full review of the calculations and AMP that Entergy has now promised to do, it only wants to eliminate the role of the public and the ASLB in that review. But the Commission has made clear that the scope of issues that may be litigated and reviewed in a license renewal hearing is co-extensive with the Staff review:

> [a]djudicatory hearings in individual license renewal proceedings will share the same scope of issues as our NRC Staff review, for our hearing process (like our Staff s review) necessarily examines only the questions our safety rules make pertinent.

Florida Power & Light Co. (Turkey Point Nuclear Generating Plants, Units 3 and 4), CLI-01-17, 54 NRC 3, 10 (2001)); *see also* (60 Fed. Reg. 22461, 22,482 n.2 (Nuclear Power Plant License Renewal; Revisions (May 8, 1995) Statement of Considerations ("The scope of Commission review determines the scope of admissible contentions in a renewal hearing absent a Commission finding under 10 CFR 2.758 [now § 2.335]"). Thus, because metal fatigue of the reactor coolant pressure boundary is an issue which much be resolved by Staff, it is necessarily an appropriate issue for resolution by the Board where, as here, the issue is properly raised by an intervenor.

THE PETITION DOES MEET ANY OF THE CRITERIA FOR COMMISSION REVIEW

The Commission's decision to review an ASLB decision is to be evaluated in light of the criteria in 10 CFR § 2.341(b)(4). The Commission is to give "due consideration" to the

existence of a "substantial question" with respect to five enumerated considerations.

Although the Petition strains to find a "clearly erroneous" finding of a material fact, as noted above only semantic disagreements, not material facts, are disputed. The Board's legal findings are not only not in conflict with prior precedents but have followed those precedents in reaching its conclusions. Although a substantial question of law and policy has been raised - i.e. whether it is acceptable to resolve the application for a license renewal without resolving all the properly raised significant safety questions - the Board's decision is in full compliance with well-established Commission precedent and court decisions on this issue. No allegation is made that there was a prejudicial procedural error.

The Petition also requests that the Commission grant review based upon an allegation that "public interest" is implicated in the issues raised, even if the issues raised do not meet any of the other criteria for granting review. In addition to the failure of the Petition to demonstrate even a colorable basis for a finding on any of the four specific review criteria, there are public interest reasons why review should not be granted. First, there is a serious question as to whether Staff has any standing to file the Petition given the fact that Applicant, the alleged "injured" party, has not only not sought review of the decision but is in the process of implementing its requirements. The Commission takes "standing" seriously and for good reason. *See* 10 CFR § 2.309(d) and *In the Matter of Entergy Nuclear Operations, Inc and Entergy Nuclear Palisades, LLC* (Palisades Nuclear Plant) *Entergy Nuclear Operations, Inc and Entergy Nuclear Fitzpatrick, LLC* (James A. Fitzpatrick Nuclear Power Plant) *Entergy Nuclear Operations*, CLI-08-19, 2008 WL 3914103 Without parties with a specific interest in the issues presented, there is less chance that the issues will be fully developed and no reason for the Commission to expend limited resources resolving

abstract issues. The Petition does not demonstrate how either Applicant or Staff are "injured" by the Board's decision, particularly since Applicant is undertaking to complete the work the Board has directed be completed. Second, once Applicant completes its work to meet the requirements imposed by the Board decision, something which is likely to occur before this matter can be fully considered by the Commission, the issues raised will be moot. Finally, the current status of this proceeding makes this a particularly inappropriate time for the Commission to begin to review any matter related to Contentions 2, 2A and 2B. In addition to this Petition, Entergy has filed a Motion for Clarification and the New England Coalition (NEC) has filed a Motion for Reconsideration related to the Board's resolution of Contentions 2, 2A and 2B. NEC has also indicated it intends to file a Petition for Review once the Motion for Reconsideration is decided. Even if the Commission were to want to review any of the issues raised in the Petition, it should wait until the remainder of the issues still to be resolved by the Board have been resolved before granting review as the issues raised may have changed substantially as the result of the remaining actions by the Board and Applicant.

CONCLUSION

For the reasons stated, the Petition for Review should be denied.

Respectfully submitted,

Sarah Hofmann
Director for Public Advocacy
Department of Public Service
112 State Street - Drawer 20
Montpelier, VT 05620-2601

Anthony Z. Roisman
National Legal Scholars Law Firm
84 East Thetford Rd.
Lyme, NH 03768

Filed: December 19, 2008

December 19, 2008

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
ENTERGY NUCLEAR VERMONT	)	Docket No. 50-271-LR
YANKEE LLC AND ENTERGY NUCLEAR	)	ASLBP No. 06-849-03-LR
OPERATIONS, INC.	)	
(Vermont Yankee Nuclear Power Station)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of the Vermont Department of Public Service Opposition to Petition for Review of Partial Initial Decision LBP-08-25 was served on the persons listed below by deposit in the U.S. Mail, first class, postage prepaid on December 19, 2008, and where indicated by an asterisk by electronic mail, the 19th day of December, 2008.

*Administrative Judge
Alex S. Karlin, Esq., Chairman
Atomic Safety and Licensing Board
Mail Stop T-3 F23
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
ask2@nrc.gov

*Administrative Judge
Dr. Richard E. Wardwell
Atomic Safety and Licensing Board
Mail Stop T-3 F23
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
rew@nrc.gov

*Administrative Judge
William H. Reed
1819 Edgewood Lane
Charlottesville, VA 22902
whrcville@embarqmail.com

*Office of the Secretary
Attn: Rulemaking and Adjudications Staff
Mail Stop: O-16 C1
U.S. Nuclear Regulatory Commission
Washington D.C, 20555-0001
hearingdocket@nrc.gov
secy@nrc.gov

*Office of Commission Appellate Adjudication
Mail Stop O-16 C1
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
OCAAmail@nrc.gov

Atomic Safety and Licensing Board
Mail Stop T-3 F23
US Nuclear Regulatory Commission
Washington, DC 20555-0001

*Lloyd B. Subin, Esq.
*Mary C. Baty, Esq.
*Jessica A. Bielecki
Office of the General Counsel
Mail Stop O-15 D21
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
lbs3@nrc.gov
mcb1@nrc.gov
jessica.bielecki@nrc.gov

*Anthony Z. Roisman, Esq.
National Legal Scholars Law Firm
84 East Thetford Road
Lyme, NH 03768
aroisman@nationallegalscholars.com

*Diane Curran, Esq.
Harmon, Curran, Spielberg & Eisenberg
1726 M. Street NW – Suite 600
Washington, D.C. 20036
dcurran@harmoncurran.com

*David R. Lewis, Esq.
*Matias F. Travieso-Diaz, Esq.
*Blake J. Nelson, Esq.
*Elina Teplinsky, Esq.
Pillsbury, Winthrop, Shaw, Pittman, LLP.
2300 N Street, N.W.
Washington, DC 20037-1128
david.lewis@pillsburylaw.com
matias.travieso-diaz@pillsburylaw.com
blake.nelson@pillsburylaw.com
Elina.teplinsky@pillsburylaw.com

*Zachary Kahn, Esq.
Atomic Safety and Licensing Board Panel
Mail Stop T-3 F23
US Nuclear Regulatory Commission
Washington, DC 20555-0001
zachary.kahn@nrc.gov

*Lauren Bregman, Law Clerk
Atomic Safety and Licensing Board
US Nuclear Regulatory Commission
Mail Stop: T-3 F23
Washington, DC 20555-0001
Lauren.Bregman@nrc.gov

*Matthew Brock, Esq.
Assistant Attorney General
Office of the Attorney General
One Ashburton Place – 18th Floor
Boston, MA 02108
Matthew.Brock@state.ma.us

*Peter L. Roth, Esq.
Office of the New Hampshire Attorney General
33 Capitol Street
Concord, NH 03301
Peter.roth@doj.nh.gov

*Raymond Shadis
37 Shadis Road
PO Box 98
Edgecomb, ME 04556
shadis@prexar.com

Respectfully submitted,

Susan M. Pittsley

Susan Pittsley
Vermont Department of Public Service