

RAS 8653

October 11, 2004

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
Before the Atomic Safety and Licensing Board

DOCKETED
USNRC

In the Matter of)

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

Docket No. 50-271

ASLB No. 04-832-02-OLA

October 19, 2004 (11:32AM)

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

Rulemaking and Adjudications Staff
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Dear Rulemaking and Adjudications Staff.

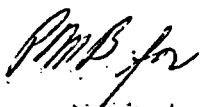
Enclosed. Please find for filing in the above captioned matter an original and two copies of

**DECLARATION OF PAUL M. BLANCH SUPPORTING NEW ENGLAND
COALITION'S REPLY TO APPLICANT AND NRC STAFF ANSWERS TO NEW
ENGLAND COALITION'S REQUEST FOR HEARING, DEMONSTRATION OF
STANDING, DISCUSSION OF SCOPE OF PROCEEDING AND
CONTENTIONS.**

This Declaration, with original signature, is being mailed by the declarant separately from the above captioned **REPLY** in order to facilitate timely delivery. Copies of the **REPLY** and the supporting **DECLARATION** are being served electronically and by First Class US Mail to all parties. We sincerely hope that this does not cause any confusion or inconvenience.

Thank you for your kind attention.

Sincerely,



Raymond Shadis
New England Coalition
Post Office Box 98.
Edgecomb, Maine 04556
207-882-7801
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SECY-02

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

ENTERGY NUCLEAR VERMONT
YANKEE L.L.C. and ENTERGY
NUCLEAR OPERATIONS, INC.

Docket No. 50-271

ASLBP 04-832-02-OLA

(Vermont Yankee Nuclear Power Station)

**DECLARATION OF PAUL M. BLANCH
SUPPORTING NEW ENGLAND COALITION'S REPLY**

I. Paul M. Blanch, declare as follows:

1. My name is Paul Blanch. I am an electrical engineer with more than 35 years of experience in the nuclear industry. I am an independent energy consultant. A copy of my curriculum vitae was attached as Exhibit E-A to my Declaration submitted in support of New England Coalition's Contentions in this case and it remains true and correct. As I stated in my Declaration and supporting Exhibit, I am, and remain, a qualified expert on matters relating to the safety of operation of nuclear power plants who is familiar with the license amendment application for an Extended Power Uprate that has been submitted by Entergy Nuclear Vermont Yankee, L.L.C. and Entergy Nuclear Operations, Inc. (hereinafter collectively referred to as "Entergy") for the Vermont Yankee Nuclear Power Station. ("Vermont Yankee").
2. I hereby reallege the statements in my previous declaration in this matter and set forth comments supporting the New England Coalition's Reply to the NRC Staff Answers. In particular, my comments below address those portions of the NRC Staff Answer criticizing aspects and bases of the contentions that I supported with my expertise and expert opinion on issues I believe are relevant to the matter before this Atomic Safety and Licensing Board Panel. These comments are intended to be a part of New England Coalition's Reply.
3. On or about page 21, NRC Staff's Answer to New England Coalition's Contentions, it is stated that:

**NEW ENGLAND COALITION'S
REPLY EXHIBIT 'A'**

This portion of the contention is inadmissible for failure to dispute the Application. In Supplement 8 to the Application, in response to RAI SPSB-C-10, Entergy performed a sensitivity case, assuming a single failure of a residual heat removal ("RHR") heat exchanger. NEC has not challenged this assessment in any way, nor does it provide any basis for an argument that an assessment involving its stated single failures would be more conservative than the analysis done by the applicant. Because NEC does not dispute the pertinent portion of the application addressing the single failure issue, this basis is insufficient to support admission of the contention.

Id. It is my professional opinion that this statement is incorrect. As NRC Staff--and its counsel--should be aware, The General Design Criteria [CDG] are very clear in that all single failures must be considered. In their Answer, Staff (or its counsel) concluded that because Entergy analyzed one single failure, that is sufficient.

4. The GDC are quite precise and clear on this matter:

Criterion 34--Residual heat removal. A system to remove residual heat shall be provided. The system safety function shall be to transfer fission product decay heat and other residual heat from the reactor core at a rate such that specified acceptable fuel design limits and the design conditions of the reactor coolant pressure boundary are not exceeded.

Suitable redundancy in components and features, and suitable interconnections, leak detection, and isolation capabilities shall be provided to assure that for onsite electric power system operation (assuming offsite power is not available) and for offsite electric power system operation (assuming onsite power is not available) the system safety function can be accomplished, assuming a single failure.

Criterion 35--Emergency core cooling. A system to provide abundant emergency core cooling shall be provided. The system safety function shall be to transfer heat from the reactor core following any loss of reactor coolant at a rate such that (1) fuel and clad damage that could interfere with continued effective core cooling is prevented and (2) clad metal-water reaction is limited to negligible amounts.

Suitable redundancy in components and features, and suitable interconnections, leak detection, isolation, and containment capabilities shall be provided to assure that for onsite electric power system operation (assuming offsite power is not available) and for offsite electric power system operation (assuming onsite power is not available) the system safety function can be accomplished, assuming a single failure.

Id. at 10 C.F.R. Part 50, Appendix "A", Criterion 34 and 35 (emphasis added).

The requirements of the GDC are part of the NRC regulations with which Entergy must comply both in the operation of Vermont Yankee Nuclear Power Station and in the material representations made to the NRC in the license amendment application at issue in this case. In my professional opinion, the intent of the rules are plain. Taken in conjunction with the General Design Criteria cited above, in my professional opinion,

Entergy must provide more than a single calculation, not only to be certain that the requirements of the NRC's rules and regulations have been met on a pro forma basis, but also to comply with any "conservative" engineering practice.

5. Finally, examining the UFSAR for the Vermont Yankee Nuclear Power Station, one finds the following statement concerning Entergy's compliance regarding compliance with design criteria:

Information regarding application of the General Design Criteria can be found elsewhere in the UFSAR and in other design and licensing basis documents.

Id. at Appendix F. My review of the UFSAR and all other design and licensing basis documents failed to uncover the referenced information.

6. In my professional opinion this absence of the information referenced in the UFSAR indicates that the documents supporting the application at issue in this case and, perhaps the UFSAR itself, contain inaccurate statements and are, at a minimum, a possible violation of the requirements in NRC regulations at 10 CFR 50.9, "Completeness and accuracy of information" and 10 CFR 50.71 et seq.
7. Having completely reviewed the NRC Staff Answer to New England Coalition's Contentions in this case, it is my considered professional opinion that the declaration I provided in support of the Contentions remains correct and the above provided information should be of common and working knowledge to anyone connected with the application, use, and enforcement of NRC rules and regulations. Information, my opinion is a safety tool. It must be accurate, complete, and available. If it is not, occupational and public health and safety cannot be assured.

I declare under penalty of perjury that the foregoing is true and correct. Executed on October 11, 2004.



Paul M. Blanch