From: Neil Sheehan / RI
To: Lawrence Doerflein
Date: 7/28/04 2:23PM
Subject: Fwd: Press release and petition for enforcement action against Vermont Yankee

For your reading enjoyment.

m-7

Mail Envelope Properties (4107EF17.587 : 9 : 35118)

Subject: Fwd: Press release and petition for enforcement action against Vermont Yankee
Creation Date: 7/28/04 2:23PM
From: Neil Sheehan

Created By: NAS@nrc.gov

Recipients
kp1_po.KP_DO
LTD (Lawrence Doerflein)

Post Office	**Route**
kp1_po.KP_DO	

Files	**Size**	**Date & Time**
MESSAGE	526	07/28/04 02:23PM
Mail		

Options

Expiration Date:	None
Priority:	Standard
Reply Requested:	No
Return Notification:	None
Concealed Subject:	No
Security:	Standard

From: Diane Screnci RI
To: Cliff Anderson; Donna Skay; Eliot Brenner; Elizabeth Hayden; Hubert J. Miller; James Wiggins; Neil Sheehan; Rick Ennis; Samuel Collins; Sue Gagner; William Ruland
Date: 7/28/04 12:56PM
Subject: Fwd: Press release and petition for enforcement action against Vermont Yankee

Diane Screnci
Public Affairs Officer
USNRC, RI
610/337-5330

From: "Paul Blanch" <pmblanch@comcast.net>
To: <pmblanch@comcast.net>
Date: 7/28/04 12:32PM
Subject: Press release and petition for enforcement action against Vermont Yankee

Enclosed is our press release and 2.206 sent to the NRC today.

PRESS RELEASE July 28, 2004

Today, two nuclear experts, Paul Blanch and Arnold Gundersen, filed a 2.206 petition with the Nuclear Regulatory Commission relating to the proposed reactor power boost at Vermont Yankee. A 2.206 petition is the only legal avenue a member of the public has to officially demand that the NRC fulfill its statutory obligation and take action critical of a nuclear facility in order to assure that facility's regulatory compliance. Blanch and Gundersen's petition asks for the NRC to issue a Demand for Information (DFI) requiring Entergy to provide the NRC with information that clearly and unambiguously describes how Vermont Yankee Nuclear Power Station complies with the NRC's regulations--specifically the General Design Criteria. The entire petition is attached to this email.

Blanch and Gundersen have thoroughly reviewed Entergy's license application to boost reactor power at Vermont Yankee and have concluded that the proposal lacks critical safety information needed to assure that VY can operate safely after its proposed extended power uprate. "Our previous discussions with the NRC on this matter have fallen on deaf ears, which has forced us to file this legal petition," said Gundersen.

"Regulation of Nuclear Power should be transparent," said Blanch. "Our petition shows that Entergy has been playing a 'shell game' with Vermont Yankee's 32-year'design bases' history. In 1972, Vermont Yankee's owners claimed that the reactor met the Draft 1967 Criteria. Then in 1982, they stated that it met the newer, harder to meet 1972 criteria. Then in 1998/1999, they switched back, saying that Draft 1967 applied. In 2003, Entergy stated that all 'references were for historical purposes.' But it looks to us like no single criteria applies," Blanch continued. "This is why it is imperative for the NRC to finally find out just how this plant was originally designed. How can the NRC authorize an uprate, when it does not know these important facts?"

Blanch and Gundersen are concerned that the proposed NRC Engineering Inspection will be meaningless without clear criteria used to evaluate the plant's safety. "After witnessing disasters such as the Davis Besse near meltdown and the Millstone debacle, we have lost all faith in the NRC and can no longer trust this agency when they state the plant is 'safe' or 'meets all applicable regulations," Said Blanch.

"The 'Design Bases' of VY are the original building instructions needed to determine if the plant can withstand the rigors of an Extended Power Uprate. Trying to find these building instructions should be straight forward, but we have searched thousands of pages in hundreds of documents and hit only dead ends," said Gundersen.

For additional information, Mr. Blanch can be reached at 860-236-0326. Mr Gundersen can be reached at (802) 865-9955.

End

Nuclear Safety Advisors

Paul M. Blanch
Energy Consultant
135 Hyde Road
West Hartford, CT 06117
860-236-0326
pmblanch@comcast.net

Arnold Gundersen
Nuclear Safety Consultant
139 Killarney Drive
Burlington, VT 05401
802-865-9955
arniegundersen@sailchamplain.net

July 29, 2004

Luis Reyes, Executive Director for Operations
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT: Vermont Yankee Nuclear Power Station (VYNPS)
Petition Pursuant to 10 CFR 2.206
Enforcement Action for Clarification to 10 CFR 50 Appendix A

Dear Mr. Reyes:

Pursuant to §2.206 of Title 10 of the *Code of Federal Regulations*, Mr. Paul Blanch and Mr. Arnold Gundersen petition the Nuclear Regulatory Commission (NRC) to take expedited and immediate enforcement action against Entergy Nuclear Operations, Inc., the licensee for the Vermont Yankee Nuclear Power Station (VYNPS). We, the petitioners, seek enforcement action in the form of a Demand for Information (DFI) requiring Entergy to provide the NRC with information that clearly and unambiguously describes how VYNPS complies with the General Design Criteria specified in 10 CFR 50 Appendix A or the draft General Design Criteria previously published by the Atomic Energy Commission in 1967.

As detailed later in this petition, the explicit definition of this information is essential to two NRC regulatory activities at VYNPS: (1) the agency's review of Entergy's application for extended power uprate, and (2) the agency's pending engineering assessment. Just as a highway patrol officer with a radar gun is handicapped at traffic enforcement without also knowing what the posted speed limits are, NRC reviewers and inspectors are handicapped at VYNPS because GDC applicability is not clearly defined nor articulated even though all NRC promulgated rules and regulations are required by statute to be definitive and unambiguous.

Proceeding with either the agency's review of Entergy's application for extended power uprate or the agency's pending engineering assessment without adequately addressing this major discrepancy makes any NRC review or assessment a sham and window dressing created in an effort to obfuscate the truth and placate the Vermont's Congressional Delegation, its Governor, Legislators, Commissioners, and its citizens by pretending to adequately review and address the major safety and reliability issues confronting a 32-year-old nuclear power plant like Vermont Yankee in its pursuit of the largest power increase in the history of the nuclear industry.

Furthermore, we demand an expedited 2.206, so that the NRC meets its statutory obligations.

Background

The NRC (then the Atomic Energy Commission or AEC) issued draft criteria proposed as Appendix A to 10 CFR 50 on July 11, 1967.[1]

The AEC issued Provisional Construction Permit No. CPPR-36 to Vermont Yankee Nuclear Power Corporation (Vermont Yankee's original owner) five months later, on December 11, 1967.[2]

The AEC adopted Appendix A to 10 CFR 50 on February 10, 1971, which went into effect 90 days after being published in the *Federal Register* on February 20, 1971.[3] The AEC stated:

> *The "General Design Criteria for Nuclear Power Plants" added as Appendix A to Part 50 establish the minimum requirements for the principal design criteria for water-cooled nuclear power plants...*

The AEC issued Facility Operating License No. DPR-28 to the Vermont Yankee Nuclear Power Corporation on March 21, 1972, or 305 days after Appendix A to Part 50 became effective on May 21, 1971.[4] In issuing the operating license, the AEC stated:

> *The Commission's regulatory staff has inspected the facility and has determined that, for operation as authorized by the license, the facility has been constructed in accordance with the application, as amended, the provisions of the Provisional Construction Permit No. CPPR-36, and Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations.*

On January 31, 2004, Entergy's Vice President, Jay Thayer's sworn statement to the NRC reported:

> *Because VYNPS is a pre-GDC plant (licensed in March 1972), and its current licensing basis is the 70 proposed General Design Criteria for Nuclear Power Plant Construction Permits (hereinafter referred to as "draft GDC") published in the Federal Register on July 11, 1967 (32FR10213), NRC's template SE for EPU requires modification for application to VYNPS's licensing basis. Appendix F of the Updated Final Safety Analysis Report describes the applicability of the draft GDC to VYNPS.*[5]

UFSAR Appendix F has a history of its own. On July 20, 1982, Vermont Yankee's owners notified the NRC of a revision to UFSAR Appendix F that explicitly indicated how each and

---

[1] *Federal Register*, Vol. 32, Page 10213, July 11, 1967.
[2] Letter dated December 11, 1967, from Peter A. Morris, Director – Division of Reactor Licensing, Atomic Energy Commission, to Roger J. Coe, Vice President, Vermont Yankee Nuclear Power Corporation.
[3] *Federal Register*, Vol. 36, No. 35, Saturday, February 20, 1971.
[4] Letter dated March 21, 1972, from Peter A. Morris, Director – Division of Reactor Licensing, Atomic Energy Commission, to Albert A. Cree, President, Vermont Yankee Nuclear Power Corporation.
[5] Letter dated January 31, 2004, from Jay K. Thayer, Site Vice President, Entergy Nuclear Operations, Inc., to Nuclear Regulatory Commission, "Vermont Yankee Nuclear Power Station / License No. DPR-28 (Docket No. 50-271) / Technical Specification Proposed Change No. 263 – Supplement No. 4 / Extended Power Update – NRC Acceptance Review," Attachment 4, "Revised Safety Evaluation Template for GDC," response to Item 2 – General Design Criteria.

every one of the final (not draft) General Design Criteria were met at Vermont Yankee.[6] Seventeen years later, Vermont Yankee's owner notified the NRC that it planned to undo its 1982 revision to Appendix F and reinstall the original Appendix F narrative explaining how the facility complied with the draft (not final) General Design Criteria.[7] Our review of Revision 18 to the Vermont Yankee UFSAR noted a footnote on every page of Appendix F stating:

> *Appendix F.2 is HISTORICAL-references to other UFSAR sections may no longer apply.*

Thus, Appendix F of the UFSAR "describes the applicability of the draft GDC to VYNPS," but it is neither a meaningful nor useful description given the footnote disclaimer on every page of Appendix F. The uselessness of UFSAR Appendix F is illustrated by Attachment 4 to Entergy's aforementioned January 31, 2004, letter to NRC. This attachment provided a template for the NRC reviewers to use in accepting the license amendment for extended power uprate at Vermont Yankee. For example, Section 2.1.1 of the Entergy template would have the NRC reviewers state:

> *The NRC's acceptance criteria are based on (1) draft General Design Criterion (GDC)-9, insofar as it requires that the reactor coolant pressure boundary (RCPB) be designed and constructed so as to have an exceedingly low probability of gross rupture or significant leakage; (2) draft GDC-33, insofar as it requires that the RCPB be capable of accommodating without rupture, and with only limited allowance for energy absorption through plastic deformation, the static and dynamic loads imposed on any boundary component as a result of any inadvertent and sudden release of energy to the coolant; (3) draft GDC-34 insofar as it requires that the RCPB be designed to minimize the probability of rapidly propagating type failures;... ".*[8]

Insofar as the petitioners can tell, Appendix F "*describes the applicability of the draft GDC to VYNPS*" as Entergy claims, but that description is neither meaningful nor useful. Plant workers and NRC inspectors/reviewers cannot rely on UFSAR Appendix F to determine how Vermont Yankee conforms with the draft GDC without first having to do considerable homework to ascertain whether its "Historical" information is relevant today. This is a heavy and undue burden for workers and NRC staffers.

The Summary Description, Section F.1 of Appendix F clearly states:

> ***The applicability of the historic design criteria conformance statements to the current facility design has not been evaluated**, [emphasis added] and as such should not be considered current design configuration. Refer to information elsewhere in the UFSAR and in other design basis documentation to determine current design configuration.*

---

[6] Letter FVY 82-84 dated July 20, 1982, from Vermont Yankee Nuclear Power Corporation to the Nuclear Regulatory Commission, Accession No. 8207220305.

[7] Letter dated September 28, 1999, from Don M. Leach, Vice President – Engineering, Vermont Yankee Nuclear Power Corporation, to Nuclear Regulatory Commission, "Vermont Yankee Nuclear Power Station / License No. DPR-28 (Docket No. 50-271) / Vermont Yankee Position Regarding the General Design Criteria."

[8] Letter dated January 31, 2004, from Jay K. Thayer, Site Vice President, Entergy Nuclear Operations, Inc., to Nuclear Regulatory Commission, "Vermont Yankee Nuclear Power Station / License No. DPR-28 (Docket No. 50-271) / Technical Specification Proposed Change No. 263 – Supplement No. 4 / Extended Power Update – NRC Acceptance Review," Attachment 4, "Revised Safety Evaluation Template for GDC," response to Item 2 – General Design Criteria.

A complete review of Revision 18 to the UFSAR clearly demonstrates this ". . .elsewhere in the UFSAR. . ." to be an unsupported and inaccurate statement as the General Design Criteria are not discussed in the UFSAR other than in Appendix F. By its own admission, Entergy appears to be misleading the NRC using circular logic that leads nowhere.

The petitioners do not assert that Vermont Yankee must conform to the draft GDC instead of the final GDC, or vice-versa. The petitioners assert that "*the minimum requirements for the principal design criteria*" applicable to Vermont Yankee and how the facility's design conforms to or deviates from those requirements must be clear and unambiguous.

Absent clear and unambiguous definition of the applicable requirements, it is extremely difficult – if not impossible – for anyone to determine whether Vermont Yankee currently complies with the requirements. Likewise, it is equally challenging for anyone to determine whether Vermont Yankee will remain within compliance with the requirements if proposed changes are adopted. Thus, it is impossible for the NRC's pending engineering assessment and its ongoing review of Entergy's extended power uprate application to ascertain critical safety and reliability issues unless the appropriate regulatory acceptance criteria are clearly established and uniformly applied.

Vermont Yankee's applicability and non-conformance to the General Design Criteria may be just the "tip of the iceberg" in that there are numerous other regulatory criterion within 10 CFR 50 that do not seem to have been either reviewed nor addressed such as Bulletins, Orders, Regulatory Guides, independence of barriers, and compliance with the single failure criteria.

The petitioners request that the NRC take enforcement action against Entergy in the form of a Demand For Information (DFI) seeking a clear and unambiguous definition of the General Design Criteria applicable to Vermont Yankee and how the facility's design conforms with or deviates from the 70 draft or the 62 final General Design Criteria. Entergy's response to the DFI should be a docketed submittal or it should be a docketed update to the facility's Updated Final Safety Analysis Report to replace the "Historical" Appendix F with a meaningful, useful, and *applicable* Appendix F. This final review and update to the FSAR must address compliance with and deviations from all of the GDC's whether it be the draft or the final versions.

The NRC has recently announced that it will be conducting an Engineering Inspection of Vermont Yankee and NRC states on its web site:

> *The NRC will use this inspection to verify that design bases have been correctly implemented for a sampling of components across multiple systems and to identify latent design issues.*

Until the design bases are clearly identified, any inspection or assessment is totally meaningless.

The petitioners believe that the enforcement action being sought by this 2.206 is straightforward, and therefore, we do not request an opportunity to present additional or clarifying information to the NRC staff in a pre-Petition Review Board meeting or teleconference. However, if the NRC staff or the licensee needs additional or clarifying information about the petition at that time, we are most willing to participate and will provide all the information we have available to assure regulatory compliance and adherence to all safety criteria by both NRC and Entergy in the interest of public safety and the continued reliability of Vermont Yankee as a key energy provider in the State of Vermont.

We therefore formally request expedited action to this 2.206 as it is clearly impossible for the NRC to conduct a meaningful inspection on any level unless the agency, its reviewers, the Vermont PSB, the Vermont Legislature, its Governor, and the State's Congressional Delegates have specific criteria and performance indicators against which to measure your proposed analysis. The design bases must be accurately reflected in the docketed information. Anything less is simply window dressing done to make the public and its representatives feel good and obfuscate the real safety and reliability issues that clearly exist at Vermont Yankee.

Sincerely,

[Original signed by]

Paul M. Blanch
Energy Consultant

[Original signed by]

Arnold Gundersen
Nuclear Safety Consultant