

File No: 17B 6558

**ACTION**

EDO Principal Correspondence Control

FROM: DUE: 11/26/02

~~EDO CONTROL: G20020602~~

DOC DT: 10/15/02

FINAL REPLY:

Raymond Shadis  
New England Coalition on Nuclear Pollution

TO:  
  
Collins, NRR

FOR SIGNATURE OF :                   \*\* GRN \*\*  
  
Collins, NRR

CRC NO:

DESC:  
  
2.206 - Vermont Yankee Personnel Unfamiliar  
with Plant Design

ROUTING:  
  
Travers  
Paperiello  
Kane  
Norry  
Craig  
Burns  
Miller, RI  
Cyr, OGC  
Skay, NRR  
Goldberg, OGC

DATE: 10/22/02

ASSIGNED TO:                   CONTACT:  
  
NRR                   Collins

SPECIAL INSTRUCTIONS OR REMARKS:

*called K. Skay at 10:10 am on 11/23 for pick-up*

*New England Coalition on Nuclear Pollution*  
VF NH ME MA RI CT NY  
POST OFFICE BOX 545, BRATTLEBORO, VERMONT 05302

October 15, 2002  
*By FAX and U.S. Mail*

U.S. Nuclear Regulatory Commission  
Samuel J. Collins, Director  
Office of Nuclear Reactor Regulation  
Mail Stop 05E-7  
11555 Rockville Pike  
Rockville, Maryland 20852

**Re: Vermont Yankee Personnel Unfamiliar with Plant Design**

Dear Mr. Collins,

On October 6, 2002 Entergy Nuclear Vermont Yankee (ENVY) declared an accident mitigation system, the Reactor Core Isolation Cooling System (RCIC) inoperable. The Event Notification (39250) stated, "Following reactor core isolation cooling system injection check valve surveillance, the check valve apparently did not fully close. This resulted in high pump suction pressure trip which would have prevented further system operation." (emphasis added).

On October 11, 2002, ENVY retracted the notification stating, "The RCIC pump does not have this aforementioned trip device." (emphasis added)

There is simply no excuse for a licensee assuming that a nuclear power plant has in place safety or accident mitigation component features that it does not have.

Effective accident mitigation requires that operators, supervisors and other responsible plant personnel be familiar in detail with the engineered safety and accident mitigation features of their plant. This was a lesson driven home in the 1979 Three Mile Island Nuclear Power Plant Accident when operators trying to recover safe reactor cooling parameters inadvertently worked to frustrate engineered safety systems.

Therefore, on behalf of the New England Coalition on Nuclear Pollution, I now request under the provisions of 10 CFR 2.206 that the NRC undertake enforcement action at Vermont Yankee Nuclear Power Plant requiring a complete review of training and qualification of nuclear operations and maintenance personnel. I further request under provisions of 10 CFR 2.206 that the NRC undertake an evaluation of the Vermont Yankee Final Safety Analysis Report to determine if the document accurately reflects the configuration of the facility in detail sufficient for operations personnel to be able to familiarize themselves with pump/protection features such as the phantom trip device referred to above.

In the arena of regulatory policy, I ask NRC to undertake an evaluation of the safety implications inherent in relying on economics of synergies (shared personnel, engineering analysis, etc) between ever larger numbers of nuclear power plants as are being acquired by operating

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companies, such as Entergy. Following the 1996 Independent Safety Assessment of Maine Yankee, company officers, including Entergy management, explained to the NRC

Commissioners that many of Maine Yankee's problems (poor maintenance, inadequate engineering design and analysis, poor quality control, etc) stemmed from poor communications and responsibilities transfer at the interface of Maine Yankee and Yankee Atomic, which supplied engineering support. If the failure to capture emerging issues and achieve comprehensive knowledge of design and function occurs because of difficulties at the simple interface of two related companies, then how many more gross misapprehensions can be expected when an operating company expects to save money by shifting supervision and upper echelon technical support from plant to plant to plant?

Within its review of Vermont Yankee, I request that NRC undertake to determine how much of pump trip device faux pas is attributable to the integration of ENVY personnel from other facilities.

Finally, as Mr. David Lochbaum, nuclear safety engineer with the Union of Concerned Scientists, points out in the attached communication, there is insufficient information in the Event Notice and in the Retraction to determine the significance of the referenced RCIC valve leak. I request that NRC publicly review its Event Notification standards with the licensee to ensure that at least preliminary risk determination can proceed from Event Notification.

Thank you for your attention and consideration.



Raymond Shadis  
Staff Advisor

Attachments:

1. Event Notification
2. Retraction of Event Notification
3. E-mail R.Shadis to David Lochbaum, UCS
4. Mr. Lochbaum's Comments on Event Notification 39250 and Retraction

Cc:

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ATTACHMENTS**1. Event Notification\***

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 |Power Reactor |Event Number: 39250  
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 FACILITY: VERMONT YANKEE REGION: 1 NOTIFICATION DATE: 10/06/2002|  
 UNIT: [1] | STATE: VT |NOTIFICATION TIME: 18:00[EDT]  
 RXTYPE: [1] GE-4 EVENT DATE: 10/06/2002|  
 EVENT TIME: 11:30[FDT]|  
 NRC NOTIFIED BY: MITCH McCLUSKIE  
 LAST UPDATE DATE: 10/11/2002  
 HQ OPS OFFICER: FANGIE JONES  
 EMERGENCY CLASS: NON EMERGENCY |PETE ESELGROTH R1  
 10 CFR SECTION: | AIND 50.72(b)(3)(v)(D) ACCIDENT  
 MITIGATION |  
 UNIT |SCRAM CODE|RX CRIT|INIT PWR| INIT RX MODE |CURR PWR| CURR RX  
 MODE 1 N N 0 Refueling |0 Refueling

## EVENT TEXT

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 RCIC SYSTEM DECLARED INOPERABLE.

Following reactor core isolation cooling system injection check valve surveillance, the check valve apparently did not fully close. This resulted in high pump suction pressure trip which would have prevented further system operation. The licensee conservatively declared the RCIC system inoperable and entered Tech Spec LCO 3.5.G.2, a 14-day action statement. Shortly afterwards the plant pressure was dropped to less than 150 psig as part of normal plant shutdown to refueling, this takes the plant out of the Tech Spec action statement as it no longer applies. The licensee is conducting an investigation of the problem with RCIC injection check valve. Repairs will be completed prior to plant restart.

The licensee notified the NRC Resident Inspector and the State of Vermont.

**2. Retraction of Event Notification\***

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RETRACTION FROM Andy Wisniewski on 10/11/02 at 1428 EDT to Gerry Waig

**"BASIS FOR RETRACTION:**

NRC Event Notification 39250 was made with the concern that this condition may have rendered the Reactor Core Isolation Cooling (RCIC) system inoperable due to a 'high pump suction pressure trip'. The RCIC pump does not have this aforementioned trip device. Therefore, the predicament that Operations has been confronted with for declaring the RCIC system inoperable may be more aptly stated as; 'Could the leakage that occurred past the discharge check valve, after the RCIC system run, have over-pressurized the RCIC system suction piping and caused the system to be unavailable for service if called upon for a 'Loss of All AC Event'. A team of engineers was assembled to determine the extent of this condition that resulted in the completion of an Operability Determination on 10/08/02 by the RCIC System Engineer, concluding that the RCIC system remained operable based upon the following two facts:

1. The RCIC suction line relief valve lifts at 150 psi.
2. The outer pump discharge valve, combined with a pressure switch, provides an additional barrier of defense. The pressure switch actuates at 74psi and causes the RCIC PUMP SUCTION PRESS HI alarm in the control room. The alarm response procedure directs operators to close the isolation valve that is downstream of the discharge check valve.

"Additionally, the leakage has been determined to be 'slight' and well within the capacity of the relief valve, based upon system performance and observation of the event as it occurred. The RCIC system would have performed its specified safety function during this condition if required.

"Therefore, ENS Event Number 39250, made on 10/06/02, is being retracted."

The licensee notified the NRC Resident Inspector of this retraction.

The RIDO (John White) was notified by the NRC Headquarters Operations Officer.

*\* EVENT NOTIFICATION 39250 and RETRACTION of EVENT NOTIFICATION 39250 ( 10/06/02 - 10/11/02) (Content Re-Formatted For Reprint)*

**3. E-mail R.Shadis to David Lochbaum, UCS**

+----->>> shadis@prexar.com

10/15/02 10:32AM >>>

Dave,

Would you please give me your take on this Event Report and Retraction?

Thanks, Ray

**4. Mr. Lochbaum's Comments on Event Notification 39250 and Retraction**

Hello Ray:

It's fishy for the following reasons:

- 1) The leakage past the check valve was subjectively labeled as being "slight." The event report

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does not specify the reactor pressure at which this "slight" leakage was observed. If it was at reduced pressure as the plant was being shut down, even a big ol' hole would have produced "slight" leakage. "Slight" leakage is only relevant if it was observed with reactor pressure at or near rated pressure of around 1.020 psig.  
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- 2) The retraction indicates that Vermont Yankee does not have a pump suction trip device, which was the basis for the initial call. Who made that initial call? Someone on the street or someone who has had an iota or two of training? Did the former owner take the owner's manual with him so the present owner had no knowledge of whether the plant had or didn't have a pump suction trip device? Not really comforting to see operability calls being made by people with no clue whatsoever about how the plant is designed.
- 3) The alleged concern was leakage overpressuring the RCIC pump suction piping and impairing system function during events such as station blackout. But are the "outer pump discharge valve, combined with a pressure switch" powered from DC sources? If not, they will not work during a station blackout event and thus cannot close. NOTE: This may be a difficult question for the present owner of Vermont Yankee to answer. After all, it's more complex than knowing whether the plant has a pump suction trip device or not, and they got that one wrong.

Thanks,  
Dave

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