

**From:** Miller, Elizabeth  
**Sent:** Monday, August 13, 2012 12:25 PM  
**To:** MacLean, Alex; London, Sarah  
**CC:** Hofmann, Sarah; Allen, Susan  
**Subject:** RE: conf exec priv for review/approval

We're getting our guy to do a few small edits to the attachment today, but plan to send it tomorrow. We typically give NRC a short heads up before sending anything press will get, as a small mutual courtesy, and will probably do that tomorrow a.m. I'll alert Sue tomorrow when it is final/sent and will post on public VSNAP site; it is monitored by reporters. It will get picked up. Liz

-----Original Message-----

From: MacLean, Alex  
Sent: Monday, August 13, 2012 12:21 PM  
To: Miller, Elizabeth; London, Sarah  
Cc: Hofmann, Sarah; Allen, Susan  
Subject: RE: conf exec priv for review/approval

Looks great. When do you plan to send?

Alexandra MacLean  
Secretary of Civil and Military Affairs  
1-802-272-0443

---

From: Miller, Elizabeth  
Sent: Monday, August 13, 2012 12:03 PM  
To: London, Sarah; MacLean, Alex  
Cc: Hofmann, Sarah  
Subject: conf exec priv for review/approval

Here is a draft letter to NRC following up on human performance errors at VY (sorry for length but easier than asking you to review attachments I thought):  
William Dean, NRC etc...

Dear Mr. Dean:

Last March, I wrote to you expressing my concern regarding a number of incidents at the Vermont Yankee Nuclear Power Station that had some relationship to human performance errors. I provided the NRC with a list of such events and asked that NRC review the matter and provide an explanation regarding why, in the Nuclear Regulatory Commission's view, the list did not constitute a pattern of incidents justifying additional oversight or other response from the NRC. You responded to my inquiry on April 4, 2012, indicating that NRC did not find any additional oversight or other measures warranted because Vermont Yankee had not exceeded the "green" threshold on any of its inspection findings, and NRC had not identified "a substantive cross-cutting issue at the plant."

I am compelled to write again because of the additional incidents that have occurred since my March letter – incidents which point to substantive cross-cutting human performance issues. I have enclosed an updated list for your review. My concern is that such incidents, while perhaps unremarkable in isolation, together may raise questions regarding the training and oversight exercised by the operator of the plant. I note that the three incidents listed on the 1st and 2nd Quarterly Reports each received individually a "green" finding. The remaining incidents on the list are not incorporated into a quarterly inspection report, either because the investigations are not yet complete or because the incident is not required to be reported. Nevertheless, these incidents have been disclosed and the facts are known to

the NRC; they likewise appear to involve either failure to perform adequate investigation or operator errors.

Do the incidents on the updated list change your view, that NRC has “not identified a substantive cross-cutting issue at the plant,” as expressed in your earlier letter? If not, why not? Is there a more formal forum for the state or any party to raise issues such as this to the NRC?

Thank you for your time. I look forward to hearing from you.

Very truly yours,

Elizabeth H. Miller  
Commissioner

Attachment:

1st Quarter NRC Inspection Report – 2012 NonCited Violation – Self Identified – Green Failure to correct an adverse of condition

“Entergy did not promptly correct an adverse condition resulting in the failure of the “B” uninterruptible power supply (UPS) motor generator (MG) set direct current (DC) tachometer coupling. Specifically, Entergy personnel did not promptly replace or verify the physical condition of the “B” tachometer coupling when it was known that it was aged and susceptible to age-related failure.” ... “The inspectors determined that the finding had a cross-cutting aspect in the Human Performance cross-cutting area, Decision-Making component, because Entergy personnel did not use conservative assumptions in decision making and did not adopt a requirement to demonstrate that the proposed action to delay the coupling replacement until June 2012 was safe.”

2nd Quarter NRC Inspection Report – 2012 NonCited Violation – NRC Identified - Green.  
Failure to conduct an Adequate Risk Assessment

A NCV for Entergy’s failure to conduct an adequate risk assessment prior to isolating the condensate pumps’ minimum flow automatic control valve.”... “The inspectors determined that the finding had a cross-cutting aspect in the Human Performance cross-cutting area, Resources component, because the equipment relied upon to perform the risk assessment, the equipment out of service software program (EOOS), did not include the condensate system automatic minimum flow control valve, which was not adequate to ensure nuclear safety.”

2nd Quarter NRC Inspection Report – 2012 NonCited Violation – NRC Identified - Green.  
Failure to conduct an Adequate Risk Assessment

A NCV for Entergy’s failure to conduct an adequate risk assessment prior to securing the “C” feedwater pump.”... “The inspectors determined that the finding had a cross-cutting aspect in the Human Performance cross-cutting area, Resources component, because the procedure describing HRE-TRAN was not sufficiently clear and complete in its description to ensure nuclear safety.”

Other Missteps at Vermont Yankee in 2012 Missing Conduit Flood Seal in a Manhole – Licensee Event Report filed May 24, 2012 A missing conduit flood seal in a manhole was discovered on May 16, 2012; the seal was noted to have been in place at the prior inspection, meaning that the seal somehow

disappeared between one inspection and the next. According to the LER, the missing flood seal compromised the interior flood design controls of the Switchgear Rooms. The Licensee Event Report noted that the cause is still under investigation.

Spent Fuel Pool water level drain event of July 22, 2012 When operating the water level control valve on the spent nuclear fuel pool, an Auxiliary Operator incorrectly interpreted the procedure for valve alignment, causing the valve to remain open. Approximately 2700 gallons of fuel pool water was transferred to the Waste Collector Tank resulting in a drop in the fuel pool level from 37.2 feet to 36.8 feet, or about 4.8 inches.

#### Unexpected Consequences from Coating Condenser Tubes with Epoxy

During the Fall 2011 refueling outage of Vermont Yankee, about one-half of the condenser tubes were coated internally with a thin coat of epoxy in an attempt to prevent leaks in the condenser. No engineering investigation regarding the epoxy's effect on the particular type of condenser installed at VY was performed prior to installation; instead the plant relied upon the success of installations at other plants with other condensers. This last Spring VY found that the epoxy coating affected the thermal performance of the condenser such that power output had to be reduced to compensate for the increase in condenser backpressure in order to continue to operate within the plant's license conditions, and multiple down powers were undertaken to diagnosis the problem as well as to remove the epoxy from a series of tubes in order to obtain a manageable back pressure.

Trip of "A" Recirculation Motor-Generator (MG) of June 18th, 2012 The Root Cause Evaluation Report identified contributing factors that led to this event as well as opportunities where it could have been prevented. For instance, in 2005 and in 2011 inspection of the motor connections identified the overheating of the bus bar but the cause of the overheating was not identified correctly partly because the connection that failed was internal to the motor and not visible. Thus, in both instances repairs were made to external connections and not to the one that was actually causing the overheating. In addition, it was identified that the condition of the external connections as found was incorrectly categorized in the Maintenance log as "Satisfactory or Normal Wear" in 2011, when it should have been categorized as "Abnormal Wear" or "Extreme Degradation" which would have flagged an engineering review. Also, there was operating experience of this condition that VY did not incorporate into their predictive/preventive maintenance procedures even though industry and two other sites in the Entergy Fleet conduct infrared thermography of motor junction boxes as part of their predictive maintenance programs. It appears this event was caused by inadequacies in Human Performance.

Elizabeth H. Miller

Commissioner of the Department of Public Service 802-828-2321, office [elizabeth.miller@state.vt.us](mailto:elizabeth.miller@state.vt.us)

---