

\*\*\* This Event has been retracted !!!

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Part 21 (PAR)

Event # 47735

<b>Rep Org:</b> ENERSYS	<b>Notification Date / Time:</b> 03/12/2012 15:33 (EDT)
<b>Supplier:</b> ENERSYS	<b>Event Date / Time:</b> 03/12/2012 (EDT)
	<b>Last Modification:</b> 05/11/2012
<b>Region:</b> 1	<b>Docket #:</b>
<b>City:</b> READING	<b>Agreement State:</b> Yes
<b>County:</b>	<b>License #:</b>
<b>State:</b> PA	
<b>NRC Notified by:</b> WILLIAM ROSS	<b>Notifications:</b> GEORGE HOPPER R2DO
<b>HQ Ops Officer:</b> PETE SNYDER	NRR PART 21 GROUP EMAIL
<b>Emergency Class:</b> NON EMERGENCY	
<b>10 CFR Section:</b>	
21.21(a)(2) INTERIM EVAL OF DEVIATION	

## INTERIM REPORT CONCERNING BATTERY CELLS WITH POTENTIALLY REDUCED DISCHARGE CAPACITY

"This letter will serve as the interim report to the Commission as pursuant to 10CFR21.21 (a) (2). The notification is in regards to a 2GN-23 battery manufactured by EnerSys and installed as part of Station Battery 2-2 at the Dominion Virginia Power, North Anna Station. Battery verification testing performed at North Anna indicated that although the battery was able to meet North Anna's 2 hour discharge requirements, cell #59 appeared to show reduced capacity. As a result, Dominion returned cells #59 and #60 to EnerSys. The cells were received at the EnerSys Corporate Laboratory under Return for Analysis (RFA) ENS-11204.

"During our analysis, which consisted of float charging, discharge testing at the 3 hour rate and an internal inspection it was determined that the cell was unable to meet the defined technical requirements for discharge capacity. Following the determination a series of analytical tests were ordered to perform more in depth analyses of the internal components. Testing on the component samples is currently underway. At this time we have not yet been able to determine if a "defect" as defined in Part 21 exists and therefore this interim report has been prepared. It is expected that the current tests will be completed by May 11, 2012. However, it should be noted that further analysis including the return of additional cells may be required to determine the cause and the reportability under Part 21 reporting."

"Throughout the return and analysis processes EnerSys has been in contact with representatives of the North Anna Station. They have been made aware of the electrical test results and recently of the internal inspection results. They are also aware that there has been no cause determination at this time. Station personnel have also been notified that this interim report has been issued."

\*\*\* RETRACTION FROM WILLIAM ROSS TO HOWIE CROUCH AT 0953 EDT ON 5/11/12 \*\*\*

JE19  
NRR

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The following information was received from EnerSys via fax:

"Subsequent to the March 12th letter, analytical testing on the components of the returned cells was completed. The results indicated there were no material composition discrepancies or assembly process anomalies. The only issue seen in cell #59 was that a portion of the positive active material physically separated from the positive grid structure. Additionally, data recorded during the manufacturing process was reviewed with no issues or nonconformities noted.

"A visit to the North Anna site was undertaken by EnerSys Engineering to review information from both Station 1 and Station 2. Battery verification testing at both stations showed all station batteries to have acceptable performance. A comparison of the testing performed by North Anna and the testing performed by EnerSys indicated that there was no further capacity degradation in cell #59. It is expected that the cells in the two station batteries will perform similarly.

"Based upon our further investigation we have concluded that no deviation per 10CFR21.21 exists. The positive active material separation was determined to be to a unique inconsistency in that plate curing lot."

Notified R2DO (Freeman) and NRR Part 21 Group via email.

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William R. Ross  
Manager, Americas Quality Assurance

May 7, 2012

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555-001

To Whom It May Concern,

This letter will serve as a follow up to the interim report sent to the Commission by EnerSys on March 12, 2012. The interim report was issued in regards to a 2GN-23 battery manufactured by EnerSys and installed as part of Station Battery 2-2 at the Dominion Virginia Power, North Anna Station. Battery verification testing performed at North Anna indicated that although the battery was able to meet North Anna's 2 hour discharge requirements, cell #59 appeared to show reduced capacity. As a result, Dominion returned cells #59 and #60 to EnerSys. The cells were received at the EnerSys Corporate Laboratory under Return for Analysis (RFA) ENS-11204.

Subsequent to the March 12<sup>th</sup> letter, analytical testing on the components of the returned cells was completed. The results indicated there were no material composition discrepancies or assembly process anomalies. The only issue seen in cell #59 was that a portion of the positive active material physically separated from the positive grid structure. Additionally, data recorded during the manufacturing process was reviewed with no issues or nonconformities noted.

A visit to the North Anna site was undertaken by EnerSys Engineering to review information from both Station 1 and Station 2. Battery verification testing at both stations showed all station batteries to have acceptable performance. A comparison of the testing performed by North Anna and the testing performed by EnerSys indicated that there was no further capacity degradation in cell #59. It is expected that the cells in the two station batteries will perform similarly.

North Anna has agreed to return several cells from Station Batteries 2-1 and 2-2 during their spring 2013 outage. These will be returned to EnerSys for confirmation of the investigation findings.

Based upon our further investigation we have concluded that no deviation per 10CFR21.21 exists. The positive active material separation was determined to be to a unique inconsistency in that plate curing lot.

Please contact me with requests for additional information, comments or questions.

Regards,

A handwritten signature in black ink, appearing to read "William Ross". The signature is cursive and somewhat stylized.

William Ross

Cc: W. Hunsberger (Dominion), J. Lewis, S. McHugh (Dominion), J. Reber, S. Vechy, S. Weik, R. Zuidema, QA files