



**GPU Nuclear Corporation**  
Post Office Box 388  
Route 9 South  
Forked River, New Jersey 08731-0388  
609 971-4000  
Writer's Direct Dial Number:

March 17, 1989

Mr. William T. Russell, Administrator  
Region I  
U.S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19406

Dear Mr. Russell:

Subject: Oyster Creek Nuclear Generating Station  
Docket No. 50-219  
Inspection Report 89-02 Response to Notice of Violation

In accordance with 10 CFR 2.201, attached is GPUN's response to the Notice of Violation identified in Inspection Report 89-02.

For further information, please call Mr. Michael Heller, Oyster Creek Licensing Engineer, at (609) 971-4680.

Very truly yours,

E. E. Fitzpatrick  
Vice President and Director  
Oyster Creek

EEF/mh/aa  
(0718A:01)  
Att.

cc: U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555

Mr. Alexander W. Dromerick, Project Manager  
U.S. Nuclear Regulatory Commission  
Division of Reactor Projects I/II  
Washington, DC 20555

NRC Resident Inspector  
Oyster Creek Nuclear Generating Station  
Forked River, NJ 08731

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## ATTACHMENT I

### Violation

10 CFR 50, Appendix B, Criterion V requires that activities affecting quality be accomplished in accordance with procedures ..."

Licensee Procedure No. A100-SME-3780-03 which references Procedure 732.2.009 revision 0, dated February 22, 1980 entitled "Installation of Raychem Splices" references Raychem Installation Guide 1050 and Inspection Guide 2050 for WCSF type In-line splice. Raychem Drawing 47005-006-03 provides size and assembly details which show a six inch splice length with a two inch seal length at each end of the splice.

Contrary to the above, on January 20, 1989, three splices were identified in Limitorque Valve No. V-14-30, used to extend the power leads for termination to a terminal block, which did not conform to the splice configuration specified by Raychem Drawing 47005-006-03 in that the splice seal length was less than two inches.

This Violation is a Severity Level V. Supplement I.

### Response

GPUN concurs with the violation as written. Provided below is the information required by 10 CFR 2.201.

#### 1. Corrective steps which have been taken and results achieved.

The deficient splices identified were cut out and replaced with splices meeting the acceptance criteria of GPUN Procedure No. A100-SME-3790-03.

The deficient splices were evaluated to determine if they would have performed their design function. It was concluded that two of the three splices were qualified based upon a test performed by Wyle Labs for Commonwealth Edison. The testing included substandard Raychem splices having overlaps (seal lengths) of 1/8" and test parameters that exceed the environmental conditions where the Oyster Creek splices were installed. The third splice did not meet the seal length criteria for the Wyle data, however, it was determined to be operable in accordance with GL 88-07 based on an evaluation that it will perform its safety function prior to experiencing any harmful effects from a harsh environment.

As noted in the inspection report, a records review was conducted and it was determined that the splices were installed in 1983 (Short Form 7135) to extend the motor leads for terminal block installation. It should be noted that this time frame (1983) was prior to full implementation of the EQ rule and identification of industry problems with Raychem splice installation. Since that time, GPUN has strengthened training and procedures for Raychem splices and applied Quality Control (QC) inspection at a much higher frequency.

GPUN had identified some deficient Raychem splices for the EMRV accoustical monitors (4 of 5 splices) in late 1986 during the 11R Outage. At that time, the list of identified EQ splices numbered 42 (33 components). Based on that finding, GPUN QC inspected 26 additional EQ splices and concluded that the deficient splices were of an isolated nature. As a result of the violation, the sample size was reevaluated using MIL STD-105D. It was concluded that the sample size was more than adequate considering that the 4 deficient splices were unique and did not represent the rest of the population of splices. This conclusion was based on the following:

- ° The deficient splices were made by contracted electricians during the 10M Outage.
- ° The deficient splices were in a very difficult environment (inside the drywell with full PC's and with limited accessibility).

GPUN also reviewed the results of EQ walkdowns to determine why the deficient splices were not identified. It was found that photographs had been taken of this particular MOV during walkdowns conducted in June 1986. The photographs did not show the Raychem splices due to their confined location.

Finally, GPUN QC has reviewed a number of inspection reports of Raychem splices inspected primarily in 1986 during the 11R refueling outage. The records show that a substantial amount of inspections were performed (over 100 inspections) and no deficiencies were identified.

2. Corrective steps which will be taken to avoid further violations.

GPUN believes that as a result of strengthened training and procedures, Raychem splice work conducted since late 1985 has been of high quality and complies with GPUN's procedure and manufacturers requirements. This violation represents work that was done prior to that time. In regard to the older population, GPUN feels that sample inspections performed have been reasonable and adequate. Furthermore, the deficient splices in MOV V-14-30 were of an isolated nature and were proven not to have any safety significance.

In order to identify and correct potentially deficient splices in this older population, GPUN will inspect splices during the course of ongoing (future) preventative maintenance, corrective maintenance, and surveillance work. Any deficiencies found will be evaluated for acceptability and replaced if necessary. This will include any opportunities for inspection of additional splices prior to start up from the 12R Refueling Outage, currently scheduled for March 17, 1989. At this time, since the date of the violation, five (5) additional MOV's have been inspected and no problems were found.

3. Date when full compliance will be achieved.

GPUN believes that full compliance was achieved on 1/31/89 upon replacement of the deficient splices.