

SSER

Task: Allegations A-02, A-208, A-274

Reference: 4-83-A-48/2; 4-84-A-06/96; 4-84-A-06/156

Characterization: The allegation is that QC inspectors from the Mercury Construction Company were not properly certified for their positions.

Assessment of Allegation: The implied significance of this allegation is that QC inspectors with the Mercury Construction Company may have been incorrectly certified because they lacked the required education and experience. The safety significance is that unqualified QC inspectors may have inspected safety-related systems, thereby rendering verification of the quality of these systems indeterminant.

The original licensing commitment for QC inspector qualifications by LP&L as stated in the PSAR was to the "green book" ANSI N45.2.6, 1973. The NRC task force staff determined that LP&L's commitments, as required in NRC Generic Letter 81-01, are inadequate in that they have committed to ANSI N45.2.6, 1978, and Regulatory Guide 1.58, Revision 1, for Operations only. The commitment to these standards was never imposed by LP&L on the site contractors for the construction phase of Waterford Unit 3.

Due to the findings in Mercury Company the scope of the review was expanded to other contractors.

This issue was addressed by reviews of the Mercury, Tompkins-Beckwith (T-B), and GEO Testing (ANST/TC-1A) QC inspection qualification procedures, ANSI N45.2.6, 1973, along with certification and resume packages.

NRC reviewed inspector certifications for 37 of the 100 Mercury QC inspectors, including certifications for all Level III personnel. Twelve inspector certifications were found questionable due to insufficient education or experience.

The certification records of 38 T-B QC inspectors were selected at random and reviewed. Thirteen inspector certifications were found questionable due to insufficient education or experience. The T-B certification procedure was determined to be inadequate when compared to the standards referenced in NRC Generic Letter 81-01.

The certification records of 40 GEO Construction Testing NDE inspectors also were selected at random and reviewed to GEO Procedures and ASNT/TC-1A. All were found to be acceptable.

This allegation has implied safety significance and will adversely affect fuel load. It is also indicative of a generic site problem for inspector certification. The full scope of the problem cannot be determined until the equipment and systems can be re-inspected by qualified inspectors.

Potential Violations: Inspectors may have been incorrectly certified because
insufficient education or a lack of previous experience.

Actions Required: Prior to fuel load, LP&L shall: (1) verify the professional credentials of 100% of the past and present site QA/QC personnel, including supervisors and managers, (2) reinspect the work performed by inspectors found unqualified, and (3) verify the proper certification of the remaining site QA/QC personnel to ANSI N45.2.6, 1973.

References:

1. Mercury Procedure, "Qualification of Inspection, Examination and Test Personnel," Rev. October 31, 1982.
2. ANSI N45.2.6, 1978.
3. Certification and resume data.
4. American Society for Non-destructive Testing Recommended Practice, ASNT/TC-1A.

Prepared by: R. Westberg _____ Date _____

Reviewed by: Team Leader _____ Date _____

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How do rights differ from 1973 to 1978 versions of 45.2.6?

It should be noted that the 1978 version of ANSI N45.2.6 is a less conservative standard, however, the 1973 version would have made verification of measures mandatory.

Can assurance be provided that

Potential Violations: Inspectors may have been incorrectly certified because insufficient education or a lack of previous experience. 4

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References:

- 1973 or 1978 version
1. Mercury Procedure, "Qualification of Inspection, Examination and Test Personnel," Rev. October 31, 1982.
 2. ANSI N45.2.6, 1978. ; ANSI N45.2.6, 1973.
 3. Certification and resume data.
 4. American Society for Non-destructive Testing Recommended Practice, ASNT/TC-1A.

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