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DOCTYPE: LETTER NOTARIZED: NO

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SUBJECT:
FINAL DEFICIENCY REPT INCLUDING CORRECTIVE ACTIONS RE BREAKDOWN IN
THE GRAVER TANK & MANUFACTURING CO'S QUALITY ASSURANCE PROGRAM
CONCERNING CONDITION INVOLVING FIELD ERECTION OF UNIT 2 CONTAINMENT
LINER.

PLANT NAME: NINE MILE POINT - UNIT 2

REVIEWER INITIAL: XJM
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CONSTRUCTION DEFICIENCY REPORT (10CFR50.55(E),
(DISTRIBUTION CODE 8004)

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1. The first part of the document discusses the importance of maintaining accurate records of all transactions and the role of the accounting department in ensuring the integrity of the financial statements.

2. The second part of the document outlines the various methods used to collect and analyze data, including the use of statistical software and the importance of sample size and representativeness.

3. The third part of the document describes the process of identifying and measuring the impact of different factors on the outcome of interest, using techniques such as regression analysis and control experiments.

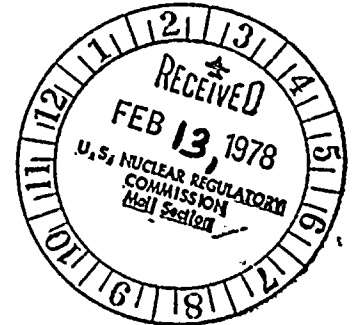
4. The fourth part of the document discusses the importance of transparency and accountability in the research process, including the need to disclose potential conflicts of interest and the limitations of the study.

5. The fifth part of the document provides a summary of the findings and conclusions, highlighting the key results and the implications for future research and practice.

NIAGARA MOHAWK POWER CORPORATION/300 ERIE BOULEVARD WEST, SYRACUSE, N.Y. 13202/TELEPHONE (315) 474-1511

February 6, 1978

Office of Inspection and Enforcement
Region I
Attention: Mr. R. T. Carlson, Chief
Reactor Construction and Engineering
Support Branch
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406



Re: Nine Mile Point Unit 2
Docket No. 50-410

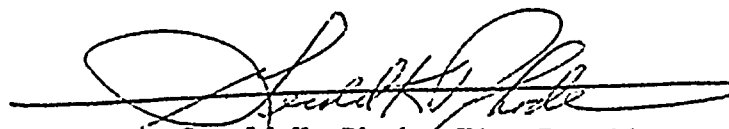
Dear Mr. Carlson:

On December 23, 1977, your staff was advised of a breakdown in the Graver Tank & Manufacturing Company's Quality Assurance Program. This condition involved field erection of the Nine Mile Point Unit 2 containment liner.

As indicated in our January 24, 1978 letter, attached is a final report providing a description of the deficiency, and analysis of the safety implications and the corrective action taken. This report is submitted in accordance with Section 50.55(e)(3) of the Commission's regulations.

Very truly yours,

NIAGARA MOHAWK POWER CORPORATION



Gerald K. Rhode, Vice President
System Project Management

PEF/szd

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Attachment

Xc: ✓ Mr. Ernst Volgenau
Inspection & Enforcement Branch
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

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I. DESCRIPTION OF THE DEFICIENCY

Stone & Webster's Field Quality Control group in accordance with their Quality Verification of Graver's Quality Program issued seven unsatisfactory Inspection Reports and two Nonconformance and Disposition Reports during a five week period ending December 15, 1977. A review of these reports revealed the following deficiencies:

- A. Contrary to 10CFR50 Appendix B Criterion VI (DOCUMENT CONTROL) work was being performed utilizing a procedure for temporary attachment removal that had not been approved by Stone and Webster Engineering.
- B. Contrary to 10CFR50 Appendix B Criterion IX (CONTROL OF SPECIAL PROCESSES) a welding procedure was being used that was not qualified for the application (i.e., welding was being performed on cladding thinner than specified in the procedure). In addition, required nondestructive testing was not being performed to verify defect removal prior to welding.
- C. Contrary to 10CFR50 Appendix B Criterion X (INSPECTION), Graver's Quality Control group was not documenting their inspection (review and acceptance) of repair welds performed as a result of removal of temporary attachments.
- D. Contrary to 10CFR50 Appendix B Criterion XVI (CORRECTIVE ACTION), measures were not initiated to correct conditions identified by Stone and Webster Field Quality Control above as being adverse to quality. After they had been instructed to do so by Stone and Webster Engineering, Graver did not document their inspection of repair welds, use the procedure identified by Stone and Webster as applicable for clad less than 1/16" thick, and they did not follow their procedure for temporary attachment removal as approved.

II. SAFETY ANALYSIS

The primary containment clad material and its function are described in Section 5.0 of the Preliminary Safety Analysis Report. The clad forms an integral part of the base material of the primary containment liner. The clad surface is designed to provide corrosion protection of the base material and preclude contamination from the suppression pool water. The cladding is not required for the design strength or leak integrity of the primary containment liner.

The weld repair cavities did not expose the carbon steel base metal. Therefore, this does not result in a safety hazard to Nine Mile Point Unit 2. The weld repairs do not jeopardize the corrosion resistant performance of the clad or the primary containment liner design requirements.



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III. CORRECTIVE ACTION

The following actions have been taken to correct the deficiencies identified in Section I:

- A. A procedure for temporary attachment removal has been reviewed and approved as of November 22, 1977.
- B. Stone and Webster has reviewed the applicability of welding procedures for clad surface weld repairs. The appropriate welding procedure in question was found acceptable as it was in accordance with the ASME code required by purchase specification. Also, clad surface weld repairs were all liquid penetrant inspected and accepted.
- C. The procedure for temporary attachment removal provides for the initiation of a temporary weld data sheet to document the weld procedure used and Quality Assurance sign-off.
- D. On January 4, 1978, a meeting was held at Stone and Webster's Cherry Hill Operations Center with Graver Management to discuss these deficiencies. As a result of this meeting, the following actions have or will be taken:
 - 1. Graver has prepared a supplement to the Nine Mile Quality Assurance Manual which has been reviewed and accepted. It is anticipated that this supplement will be issued shortly. This supplement establishes a system to assure that conditions adverse to quality such as audit findings, deficiencies, deviations from procedures, failures, malfunctions and nonconformances are identified, corrected and documented. The procedure will require a response from the affected party and will also require periodic management review of corrective actions.

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2. Graver will be supplementing its Quality Assurance activities by adding a permanent Quality Assurance representative to the Nine Mile field crew. In addition to his defined Quality Assurance responsibilities, he will provide an additional interface with Stone and Webster Field Quality Control. HOWARD
 3. As of January 16, 1978, Graver has assigned a Quality Assurance Management individual to the Nine Mile site on a temporary basis. This individual will review the activities at the site and report to Graver management on the progress of Quality Assurance and site activities.
 4. The appropriate Construction Interface Procedure will be revised to reflect a workable Inspection Report and Nonconformance & Disposition Report interface between Graver and Stone and Webster.

Stone and Webster Field Quality Control will increase their surveillance of the Graver Quality Assurance Program and report to Stone and Webster Project Management and Niagara Mohawk on the progress and effectiveness of Graver's Quality Assurance site activities.

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