NIAGARA MOHAWK

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

SAMUEL F. MANNO
VICE PRESIDENT
NUCLEAR CONSTRUCTION

January 31, 1983

Mr. R. W. Starostecki, Director
U.S. Nuclear Regulatory Commission
Region I
Division of Project and Resident Programs
631 Park Avenue
King of Prussia, PA 19406

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

Dear Mr. Starostecki:

Enclosed is a final report in accordance with 10CFR50.55(e) for the problem concerning the enhancement of weld radiographs. This condition was reported via telephone to Mr. H. Kister of your staff on November 8, 1982, as a potentially reportable deficiency. An interim 30 day report was submitted to you on December 6, 1982.

Very truly yours,

S. F. Manno

Samuel F. Manno
Vice President
Nuclear Construction

Enclosure
xc: Director of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555
Mr. R. D. Schulz, Resident Inspector

IE27

NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT NUCLEAR STATION UNIT 2
DOCKET NO. 50-410

Final Report for the Problem
Concerning Enhancement of
Weld Radiographs

Description of the Problem

As required by NRC IE Bulletin 82-01, Revision 1, Supplement 1, a review of ITT Grinnell Corporation radiographs of welds associated with piping having a wall thickness of 1/2 inch or less was initiated. Only ITT Grinnell shop radiographs were required to be reviewed to respond to the bulletin. However, an initial review of welds radiographed at the job site revealed that some films were enhanced. Since this review was outside the scope of Bulletin 82-01, this matter was reported as a potentially reportable deficiency under 10CFR50.55(e).

The review of the radiographs in question has since been completed. The investigation was conducted in three phases, as detailed below.

Phase I involved a review of the ITT Grinnell radiographs performed between April 30, 1981 and July 15, 1981. As a result of this review, it was discovered that the site radiographs for 14 welds (involving 35 films) had been artificially enhanced.

Phase II of this evaluation consisted of a review of the ITT Grinnell site radiographs performed one month prior (March 30, 1981, to April 30, 1981) and one month after (July 15, 1981 to August 15, 1981) the time period stated in Phase I. The results of this review revealed that for the time period one month prior to April 30, 1981 (March 30, 191 to April 30, 1981) no site radiograph was performed by ITT Grinnell on welds falling under the code class/thickness criteria stated in the Nuclear Regulatory Commission IE Bulletin. For the time period of one month after July 15, 1981 (July 15, 1981 to August 15, 1981), ITT Grinnell had radiographed nine welds at the site that fell within the parameters of the IE bulletin for code class/thickness. The radiographs for these nine welds showed no artificial enhancement.

Phase III of this evaluation consisted of all other applicable ITT Grinnell site radiographs outside the time frames stated in Phases I and II on a sampling basis. As determined by Stone & Webster Engineering Corporation, QAD 7.11, a sample of 50 ITT Grinnell radiographs were reviewed by Stone & Webster Engineering Corporation and no artificial enhancement was found.

The results of this three phase review indicated that the problem concerning artificial enhancement of the penetrameter sensitivity level regarding the ITT Grinnell site radiographs was isolated to a specific time period (April 30, 1981 to July 15, 1981) and to certain individuals employed by ITT Grinnell during that time period. Consequently, an additional investigation was conducted for all welds, regardless of code class/wall thickness, that were radiographed/evaluated between April 30, 1981 and July 15, 1981 by these specific ITT Grinnell personnel. The results of this investigation revealed that only two additional welds had been radiographed/evaluated by these individuals. The ITT Grinnell site radiographs for one of these welds showed no artificial enhancement. The ITT Grinnell site radiographs for the other weld could not be located; the weld was reradiographed and was found to be satisfactory.

Analysis of Safety Implications

The welds for which ITT Grinnell site radiographs were found to be artificially enhanced have been reradiographed and found to be acceptable except for one weld. This weld could not be effectively radiographed because of foreign material in the section of pipe and was subsequently cut out.