

SAMUEL F. MANNO  
VICE PRESIDENT  
NUCLEAR CONSTRUCTION

August 31, 1982  
82-483

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

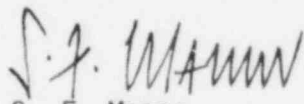
Re: Nine Mile Point Unit 2  
Docket No. 50-410

Dear Mr. Starostecki:

Enclosed is a final report in accordance with 10CFR50.55(e) for the deficiency regarding the welding of certain ASME III, Class 1 joints using ASME III, Class 2 and 3 welding procedures. This condition was reported by telephone to Mr. H. Kister of your staff on April 29, 1982.

Very truly yours,

NIAGARA MOHAWK POWER CORPORATION

  
S. F. Manno  
Vice President  
Nuclear Construction

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

NIAGARA MOHAWK POWER CORPORATION  
Nine Mile Point Unit 2  
Docket No. 50-410

Final Report for a Deficiency  
Under 10CFR50.55(e) Regarding  
the Welding of ASME III, Class 1  
Joints Using ASME III, Class 2 and  
3 Welding Procedures

Description of the Deficiency

Ten (10) ASME III Class 1 joints were either partially or completely welded by the field piping erection contractor, IIT Grinnell, using ASME III, Class 2 and 3 welding procedures. Of the ten joints, four were completed, three were stopped in progress, one was tack welded only, and two had weld end preparation repairs performed, but had not yet been fitup. An additional ninety-two (92) ASME III, Class 1 joints were identified on the contractor's planners (travelers) for welding using the same improper welding procedures. Welding of the additional ninety-two joints had not begun at the time this condition was discovered.

Analysis of Safety Implications

The difference between the ASME III, Class 1 procedures that should have been used and the ASME III, Class 2 and 3 procedures that actually were used is that the Class 1 procedures require impact test qualification whereas the Class 2 and 3 procedures do not. Impact-qualified welding procedures provide additional assurance of adequate toughness of the joint by controlling the welding parameters that affect heat input.

Although not all of the heat input parameters were monitored for the welding performed, an evaluation of the processes used, the parameters monitored, and other restrictions imposed by the governing specification and procedures indicates that the expected heat input was such that adequate toughness of the joint would be developed.

Based on the above evaluation, we are of the opinion that had this problem remained uncorrected it would not have adversely affected the safe operation of the plant and is not a reportable deficiency under 10CFR50.55(e). However, the ten welds will be replaced and the planners identifying the additional ninety-two joints have been revised as outlined under Corrective Action.

Corrective Action

1. The welds of the ten joints, which were completely/partially made utilizing the improper ASME III, Class 2 and 3 welding procedures, will be removed and replaced using the ASME III, Class 1 welding procedures. This work will be completed by January 31, 1983.

2. The planners identifying the improper welding procedure for the ninety-two joints have been revised to indicate ASME III, Class 1 welding procedures.
3. ITT Grinnell has modified and strengthened its Site Engineering Organization:
  - (a) ITT Grinnell Cat I Planner preparation positions have been upgraded.
  - (b) ITT Grinnell Cat I Planner checking has been strengthened.
  - (c) ITT Grinnell has established additional level of review, "Verification of Code Acceptability."
4. ITT Grinnell has developed a revised training program for Engineering and QC personnel involved in planner preparation and checking.
5. As an interim measure, Stone & Webster Engineering Corporation (SWEC) now reviews and concurs with the adequacy of Engineering and QA/QC instructions of all Cat I Welding Planners prior to issuance to construction. As of July 1, 1982, only those Cat I Welding Planners that have been reviewed by and concurred with by SWEC are released by ITT Grinnell for construction. The results of SWEC reviews will be closely monitored. At such time that SWEC and Niagara Mohawk determine that the planners are being consistently and properly prepared, SWEC review and concurrence will be reduced or discontinued, as appropriate.
6. ITT Grinnell Site QA/QC Organization has been modified and expanded. A new Site QA Manager position has been added with substantial oversight responsibilities, including continued program evaluation.