

October 9, 1984  
(NMP2L 0196)

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 our detailed response to the Notice of Violation dated August 29, 1984 and the accompanying Inspection Report No. 50-410/84-11.

Very truly yours,

*C. V. Mangan*

C. V. Mangan  
Vice President

Nuclear Engineering & Licensing

GG:ja

Enclosure

xc: R. A. Gram, Resident Inspector  
Project File

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Niagara Mohawk Power Corporation  
Nine Mile Point Unit #2  
Docket No. 50-410

Response to Notice of Violation  
attached to NRC Inspection Report No. 50-410/84-17

Violation 1:

10 CFR 50 Appendix B, Criterion V and the Nine Mile Point, Unit 2 PSAR, Section 17.D.3.6., require that activities affecting quality be prescribed by and accomplished in accordance with the appropriate instructions, procedures, or drawings. Stone and Webster Engineering Corporation (SWEC) Specification P301X details specific requirements for the installation of the Omni Restraints and provides for SWEC approval of ITT Grinnell procedures which control restraint erection and QC verification of the erection process. ITT Grinnell Procedure P301X-ITT-G1 delineates the Omni Restraint installation process and Procedure FQCR 4.2-34 specifies Quality Control Hold Points to be verified during this restraint installation process.

Contrary to the above, as of July 25, 1984, an activity affecting the quality of the Omni Restraints was not accomplished in accordance with the appropriate procedures, in that certain shim material was cut without the P301X-ITT-G1 procedurally required report to engineering of side gap dimensions and without the FQCR 4.2-34 procedurally required hold point verification steps.

This is a Severity Level V Violation (Supplement II).

The following is submitted in response to this violation:

ITT Grinnell procedure P301X-ITT-G1, delineating the Omni Restraint installation process, did require a report of the as-built dimensions of the side gaps be submitted to SWEC Engineering. Similarly, ITT Grinnell

procedure FQCR 4.2-34 required in-process QC verification of side gap dimensions, as well as pipe position and Omni base placement. As stated in specification P301X, this information was required by Stone & Webster Engineering for determination of end shim size or other means required to secure end shims. However, E&DCR F01632A had been issued by Engineering to specify shim sizing, thus making it unnecessary to report side gap dimensions prior to determining shimming requirements.

Although ITT Grinnell failed to follow their procedural requirements, the shim cut was accomplished in accordance with appropriate Engineering technical direction (E&DCR F01632A) and with appropriate Quality Control verifications.

#### Corrective Actions

ITT Grinnell Quality Assurance has issued Quality Finding Report 0237 to document the procedural violation by ITT Grinnell personnel. In addition, E&DCR C02756 was issued July 27, 1984 to revise the reporting requirements of specification P301X, based on E&DCR F01632A.

#### Preventive Actions

ITT Grinnell procedures P301X-ITT-G1 and FQCR 4.2-34 will be revised to reflect the specification changes. Additional actions being taken are discussed in the response to violation 2.

#### Schedule

Full compliance will be achieved by November 15, 1984.

## Violation 2:

10 CFR 50 Appendix B, Criterion III and the Nine Mile Point, Unit 2 PSAR, Section 17.D.3.4, require that design changes be subject to design control measures, which include assurances that the design bases are correctly translated into specifications, drawings, procedures and instructions and that materials, parts, equipment, and processes are suitable for their application to the design. Stone and Webster Engineering Corporation (SWEC) is authorized to implement design changes through various means, to include direct revision of a specification or drawing or issuance of an Engineering and Design Coordination Report (E&DCR). Properly controlled and issued E&DCR's list those design documents affected by the design change.

Contrary to the above, as of July 27, 1984, the established SWEC design change control measures failed, in three separate cases, to provide the correct translation of design information into specifications or drawings, in that:

- 1) E&DCR F01632A was issued without revising the affected specification, resulting in conflicting information provided to the installer.
- 2) E&DCR F11411 issued incomplete drawing revision details, resulting in a final installed field configuration, contrary to design.
- 3) Drawings EV-41A & EV-60A, in conjunction with Specification P283B, failed to provide all applicable material requirements, resulting in the installation of bolting material which had not been reviewed for suitability in the design process.

This is a Severity Level IV Violation (Supplement II).

The following is submitted in response to this violation:

The details of the incidents are discussed below:

- 1) The Omni restraints were supplied slightly oversized and were to be trimmed in the field to allow fitup around the pipe. The fitup required side shimming to fill the gaps between the Omni base and the shear block. The intent of the engineers, at that time, was to give shimming and welding details for the side shims on a case by case basis. Both Stone & Webster specification P301X and ITT procedures required "as-built" submittal of side gap dimensions to the engineers.

In July 1984, E&DCR F01632A revised Drawing EV-107T to supply generic shimming details. Specification P301X was not revised to remove the requirement for "as built" submittal, although the submittal requirement was actually no longer necessary due to the generic details provided.

At this point, the responsibility of the contractor was still to report the "as-built" gap dimensions to the engineers prior to cutting shims. E&DCR C02756 was issued in July 1984 to state the long term use of the "as-built" information (verification of restraint adequacy) in place of the originally stated short term use (determination of shim dimension).

- 2) The connection of a platform member to an embedment plate was changed from a bolted connection to a welded connection by E&DCR F11411 in May 1984. Although the bolts were assumed to carry no load in the backup calculation, the E&DCR pictorially required that the bolts remain in place. The constructor, however, removed these bolts.

N&D 8653 was issued and dispositioned "accept-as-is" to document the discrepancy between the bolts as shown on the detail and the existing field condition. As noted above, no change in the calculation was required.

- 3) The original W. J. Woolley drawings of the hatches and air lock called for the attachment of studs to each split ring and then the securing of each split ring in its location. E&DCR F10305, later revised by E&DCR C11331, was issued to allow the constructor to attach the split ring to the concrete surface with Richmond concrete inserts.

The bolting material was not identified on drawings EV-41A and 60A, as was identified by the NRC inspector. However, Specification P283B requires that bolts associated with the air lock and hatches be SA 193 GRB7 unless noted otherwise on the drawings.

The constructor selected an alternate bolting material without proper authorization, as noted by the NRC inspector. To document this condition, N&D 8323 was initiated on July 2, 1984 and was dispositioned "accept-as-is" on July 3, 1984. Since the anchor

bolts are not loaded for this particular configuration, the bolt material was not essential. However, the appropriate prior engineering authorization should have been obtained.

Niagara Mohawk believes that the common factor associated with these deficiencies is the failure of the constructor to follow engineering instructions and directions. In all three cases, the instructions and drawings technically represented the design. Nevertheless, Niagara Mohawk has recognized the potential for misinterpretation of any instruction and, therefore, the following actions have been or will be implemented.

- 1) Niagara Mohawk has implemented a program to inform all craft workers of the importance of following engineering instructions and of referring any vague, confusing or conflicting situations to the engineers for appropriate resolution.
- 2) In order to maintain craft awareness, the program described in paragraph 1 will be augmented with a sticker and poster campaign.
- 3) Niagara Mohawk will direct Stone & Webster to conduct a training session for the foremen of each craft involved in safety related work. The training will be performed by Stone & Webster Engineering personnel and will stress the constructor's obligation to follow engineering instructions. In addition, the engineer will specifically identify and review previous constructor errors to increase the awareness of potential problems.

These actions will be implemented by December 1, 1984.