

June 28, 1979

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

Dear Mr. Carlson:

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

Your letter dated June 18, 1979 requested additional information regarding the flued head forging and penetration sleeves for Nine Mile Point Unit 2. This letter provides the requested information..

Penetrations are required to be Class 1 parts by ASME Section III Code classification. The following reference paragraphs are offered to substantiate this classification: NE-1130, NE-1131 and NE-1132. Although not in existence on the contract date of the containment liner, further clarification of the classification of penetrations is given in paragraphs NCA-3254.2 (Summer 1977 Addendum) and NB-1130 and NB-1131 (Summer 1978 Addendum).

Radiographic examination is generally required as the method of examination, with special exceptions, for all containment liner seam and penetration welds to satisfy Regulatory Guide 1.19, Revision 1 dated August 11, 1972. Niagara Mohawk concluded that radiography would not be meaningful and would not satisfy all code requirements. Consequently, ultrasonic examination and liquid penetrant or magnetic particle was specified as the preferred inspection method, as explained below.

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Your April 26, 1979 letter detailed an alleged item of non-compliance with ASME Section III, Summer 1973 Addendum Article NB-5000, Paragraph NB-5231. Paragraph NB-5231 applies to attachment welds which are for piping systems under Class 1 construction. The welds in question between the flued head forging and penetration sleeve do not form an integral part of the piping pressure retaining boundary. These welds are Class 1 containment structural attachments and only require a magnetic or liquid penetrant examination in accordance with Paragraph NB-5260.

Regulatory Guide 1.19, Revision 1 dated August 11, 1972 requires all welds in penetrations, airlocks and access openings that are not backed by concrete, such as welds between penetrations and flued fittings, and flued fittings and pipelines, to be fully examined in accordance with the examination methods of Article NE of Section III of the ASME Code. Sub-paragraph NE-5231.1 of the Winter 1972 Addendum identifies this joint configuration as a special exception where ultrasonic examination may be performed in lieu of radiography.

Radiography was not specified because the flued head forging geometric configuration would not permit radiography in accordance with ASME III requirements. Penetrameter sensitivity required by the code may not be obtainable. Density changes which will appear on the film because of the tapers on the outer diameter of inner forged pipe make it difficult to interpret the radiograph. Because of the above reasons, meaningful radiography in accordance with code requirements may not be possible.

The flued head design incorporated the use of backing strip welds, for which ultrasonic examination in lieu of radiographic examination is the more meaningful and the preferred method.

Furthermore, the ASME Code in Section III, Division 2, recognizes the fact that ultrasonic examination of welds with backing bars may be done successfully. This is evidenced by the fact that Paragraph CC-5521 of ASME Section III, Division 2 (Winter 1977 Addendum) requires ultrasonic examination to be performed on welds with backing bars in lieu of radiography.



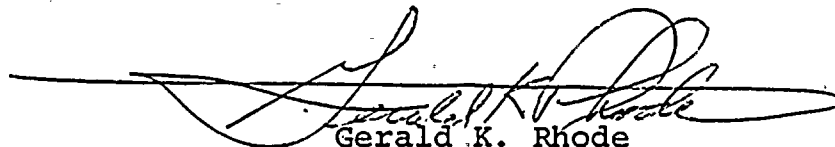
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As we discussed in the response to Inspection Report 79-02, radiography will be attempted on these welds. If meaningful results cannot be obtained, radiography will be terminated.

Very truly yours,

NIAGARA MOHAWK POWER CORPORATION



Gerald K. Rhode  
Vice President  
System Project Management

PEF/szd

