

July 8, 1980

Office of Inspection and Enforcement
Region I
Attn: Mr. Boyce H. Grier, Director
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Mr. Grier:

Re: Nine Mile Point Unit 1
Docket 50-220
DPR-63

Your May 8, 1980 Inspection and Enforcement Bulletin 80-11 requested information regarding masonry walls at Nine Mile Point Unit 1. The attachment to this letter addresses Items 1, 2a and 3 of that Bulletin. The results of the re-evaluation (Item 2b) will be submitted by November 8, 1980.

The information contained in the attachment to this letter demonstrates that continued operation of Nine Mile Point Unit 1 does not present an undue safety hazard to the public.

Very truly yours,

NIAGARA MOHAWK POWER CORPORATION

T. E. Lempges

T. E. Lempges,
Vice President - Nuclear Generation

MGM/kmb

cc: NRC Office of Inspection and Enforcement
Division of Reactor Operating Inspection
Washington, D.C. 20555

8008010 079

State of New York)

County of Onondaga)

ss:

THOMAS E. LEMPGES, being duly sworn, says:

I am Vice President, Nuclear Generation of Niagara Mohawk Power Corporation. I have read the foregoing letter and the fact contained in the letter and attachment are true to the best of my knowledge, information and belief.

Thomas E. Lempges
Thomas E. Lempges

Sworn to before me on this
8th day of July, 1980

Cynthia A. Petta
Notary Public

CYNTHIA A. PETTA
Notary Public in the State of New York
Qualified In Onondaga Co. No. 4682225
My Commission Expires March 30, 1982

NIAGARA MOHAWK POWER CORPORATION
RESPONSE TO INSPECTION AND ENFORCEMENT BULLETIN 80-11
FOR
NINE MILE POINT UNIT 1

Item 1

Identify all masonry walls in your facility which are in proximity to or have attachments from safety related piping or equipment such that wall failure could affect a safety related system. Describe the systems and equipment, both safety and non-safety related, associated with these masonry walls. Include in your review, masonry walls that are intended to resist impact or pressurization loads, such as missiles, pipe whip, pipe break, jet impingement, or tornado and fire or water barriers, or shield walls. Equipment to be considered as attachments or in proximity to the walls shall include, but is not limited to, pumps, valves, motors, heat exchangers, cable trays, cable/conduit, HVAC ductwork, and electrical cabinets, instrumentation and controls. Plant surveys, if necessary, for areas inaccessible during normal plant operation shall be performed at the earliest opportunity.

Response

We have identified approximately 74 masonry walls at Nine Mile Point Unit 1 whose failure could affect a safety related system. We have identified the equipment and systems associated with those walls. A listing is available for your review in our files. The majority of the masonry walls serve as partitions or shielding. These walls do not generally serve to resist loads such as missiles, pipe whip, jet impingement, or tornados. These walls do not resist primary building forces.

Item 2

Provide a re-evaluation of the design adequacy of the walls identified in Item 1 above to determine whether the masonry walls will perform their intended function under all postulated loads and load combinations. In this regard, the NRC encourages the formation of an Owner's Group to establish both appropriate re-evaluation criteria and where necessary, a later confirmatory masonry test program to quantify the safety margins established by the re-evaluation criteria (this is discussed further in Item 3 below).

- a. Establish a prioritized program for the re-evaluation of the masonry walls. Provide a description of the program and a detailed schedule for completion of the re-evaluation for the categories in the program. The completion date of all re-evaluations should not be more than 180 days from the date of this bulletin. A higher priority should be placed on the wall re-evaluations considering safety related piping 2-1/2 inches or greater in diameter, piping with support loads due to thermal expansion greater than 100 pounds, safety related equipment weighing 100 pounds or greater, the safety significance of the potentially affected systems, the overall loads on the wall, and the opportunity for performing plant surveys and, if necessary, modifications in areas otherwise inaccessible. The factors described above are meant to provide guidance in determining what loads may significantly affect the masonry wall analyses.

Response

- a. We are currently investigating the specific design criteria used for each wall. Priorities will be assigned to those walls for which the original design did not include the effects of attachments and which have the most vital safety related equipment associated with them. We will re-evaluate the walls based on the loading criteria in the FSAR and the design and analysis requirements of ACI 531-79. The re-evaluation will be completed and a report submitted by November, 1980.

Item 3

Existing test data or conservative assumptions may be used to justify the re-evaluation acceptance criteria if the criteria are shown to be conservative and applicable for the actual plant conditions. In the absence of appropriate acceptance criteria, a confirmatory masonry wall test program is required by the NRC in order to quantify the safety margins inherent in the re-evaluation criteria. Describe in detail the actions planned and their schedule to justify the re-evaluation criteria used in Item 2. If a test program is necessary, provide your commitment for such a program and a schedule for submittal of a description of the test program and a schedule for completion of the program. This test program should address all appropriate loads (seismic, tornado, missile, etc.). It is expected that the test program will extend beyond the 180 day period allowed for the other bulletin actions. Submit the results of the test program upon its completion.

Response

The re-evaluation criteria as stated in Item 2a are conservative in that ACI 531-79 incorporates a minimum safety factor of 3 to account for uncertainties. Therefore, no testing is required.

