

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON D. C. 20555

January 11, 1991

Docket No. 50-410

Mr. B. Ralph Sylvia
Executive Vice President, Nuclear
Generation
Niagara Mohawk Power Corporation
301 Plainfield Road
Syracuse, New York 13212

Dear Mr. Sylvia:

SUBJECT: SAFETY EVALUATION FOR FRACTURE MECHANICS ANALYSIS C? FLAW

INDICATION IN HIGH PRESSURE CORE SPRAY NOZZLE WELD AT NINE

MILE POINT, UNIT NO. 2 (TAC NO. 79320)

By letter dated December 28, 1990, the Niagara Mohawk Power Corporation (the licensee) submitted for staff review and approval a fracture mechanics evaluation of a flaw in the Nine Mile Point Nuclear Station, Unit No. 2 reactor vessel high pressure core spray nozzle safe end to safe end extension weld KC-32. By letter dated January 7, 1991, the licensee committed to perform an ultrasonic inspection of this weld during a mid-cycle inspection between the beginning of the fifth month and prior to the end of the tenth month of the second fuel cycle. This mid-cycle inspection will utilize the same methodology and equipment as the inspection performed during the first refueling outage when the flaw was initially detected.

The NRC staff has reviewed your December 28, 1990, submittal and your January 7, 1991, commitment to perform a mid-cycle inspection. In our enclosed safety evaluation, we have concluded that to provide an acceptable level of quality and safety, the flaw in weld KC-32 should be ultrasonically reexamined at the committed mid-cycle inspection. Based on our enclosed safety evaluation and the licensee's commitment to perform the mid-cycle inspection, the NRC staff has determined that the Nine Mile Point, Unit No. 2 reactor pressure vessel is currently acceptable for service without excavation and weld repair of the flaw in weld KC-32.

The NRC staff recommends that the licensee submit for staff review and approval a revised fracture mechanics analysis as described in the enclosed safety analysis. The revised analysis must be submitted to permit staff review and approval prior to resuming operation after the mid-cycle inspection. The analysis should contain the results of the mid-cycle inspection and the uncertainties discussed in our safety evaluation.

The licensee is requested to notify the NRC staff of the schedule for performing the mid-cycle inspection so that the NRC staff can witness the inspection if desired. In addition to your planned ultrasonic examination, the NRC staff also requests that you consider using radiographic examination techniques for examination of weld KC-32 during the mid-cycle inspection.

Please contact me at (301) 492-1402 if you have any questions regarding this issue.

Sincerely,

Donald & Brinkman

Donald S. Brinkman, Senior Project Manager Project Directorate I-1 Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Enclosure: Safety Evaluation

cc w/enclosure: See next page The licensee is requested to notify the NRC staff of the schedule for performing the mid-cycle inspection so that the NRC staff can witness the inspection if desired. In addition to your planned ultrasonic examination, the NRC staff also requests that you consider using radiographic examination techniques for examination of weld KC-32 during the mid-cycle inspection.

Please contact me at (301) 492-1402 of you have any questions regarding this issue.

Sincerely,

ORIGINAL SIGNED BY:

Donald S. Brinkman, Senior Project Manager Project Directorate I-1 Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Enclosure: Safety Evaluation

cc w/enclesure: See next page

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Mr. B. Ralph Sylvia Niagara Mohawk Power Corporation

cc:

Mr. Mark J. Wetterhahn, Esquire Bishop, Cook, Purcell & Reynolds 1400 L. Street, N.W. Washington, D. C. 20005-3502

Mr. Richard Goldsmith
Syracuse University
College of Law
E. I. White Hall Campus
Syracuse, New York 12223

Resident Inspector Nine Mile Point Nuclear Power Station P. O. Box 99 Lycoming, New York 13093

Mr. Gary D. Wilson, Esquire Niagara Mohawk Power Corporation 300 Erie Boulevard West Syracuse, New York 13202

Mr. Peter E. Francisco, Licensing Niagara Mohawk Power Corporation 301 Plainfield Road Syracuse, New York 13212

Ms. Donna Rc.; New York State Energy Office 2 Empire State Plaza 16th Floor Albany, New York 12223

Supervisor Town of Scriba R. D. #4 Oswego, New York 13126 Nine Mile Point Nuclear Station Unit 2

Regional Administrator, Region I U.S. Nuclear Regulatory Commission 475 Allendale Road King of Prussia, Pennsylvania 19406

Charlie Donaldson, Esquire Assistant Attorney General New York Department of Law 120 Broadway New York, New York 10271

Mr. Richard M. Kessel Chair and Executive Director State Consumer Protection Board 99 Washington Avenue Albany, New York 12210

Mr. Richard Abbott, Unit 2 Station Superintendent Nine Mile Point Nuclear Station Niagara Mohawk Power Corporation P. O. Box 32 Lycoming, NY 13093

Mr. Joseph F. Firlit Vice President - Nuclear Generation Nine Mile Point Nuclear Station Niagara Mohawk Power Corporation P. O. Box 32 Lycoming, New York 13093