

# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

February 2, 1995

Mr. B. Ralph Sylvia Executive Vice President, Nuclear Niagara Mohawk Power Corporation Nine Mile Point Nuclear Station P.O. Box 63 Lycoming, NY 13093

## SUBJECT: GENERIC LETTER (GL) 94-03, "INTERGRANULAR STRESS CORROSION CRACKING OF CORE SHROUDS IN BWRs," NINE MILE POINT NUCLEAR STATION, UNIT 2 (NMP-2) (TAC NO. M90103)

Dear Mr. Sylvia:

By letter dated August 23, 1994, Niagara Mohawk Power Corporation (NMPC) provided NMPC's response to GL 94-03, "Intergranular Stress Corrosion Cracking of Core Shrouds in BWRs," for NMP-2. The NRC staff requested in GL 94-03 that licensees take the following actions with respect to their core shrouds: 1); inspect their core shrouds in their BWR plants no later than the next  $\frac{1}{2}$ refueling outage, 2) perform materials related and plant specific consequence safety analyses with respect to their core shrouds, 3) develop core shroud inspection plans which address inspection of all core shroud welds and which takes into account the latest available inspection technology, 4) develop plans for evaluation and/or repair of their core shrouds, and 5) work closely with the BWR Owners Group with respect to addressing intergranular stress corrosion cracking of BWR internals.

The NRC staff required that licensees submit, under oath or affirmation, the following information in response to GL 94-03 within 30 days of the date of issuance: 1) a schedule for inspection of their core shrouds, 2) a safety analysis, including a plant-specific safety analysis as appropriate, which supports continued operation of the facility until inspections are conducted, 3) a drawing(s) of the core shroud configurations, and 4) a history of shroud inspections completed to date. The NRC staff also required that licensees submit, under oath or affirmation, no later than 3 months prior to performing their core shroud inspections, their scope for inspection of their core shroud based on inspection results. The NRC staff further required licensees to submit, under oath or affirmation, and/or repairing their core shroud based on completed to a staff further required licensees to submit, under oath or affirmation.

The NRC staff has completed its review of your response. Based on the staff's review of the response to GL 94-03, and in regard to the information that was requested to be submitted within 30 days of the date of issuance of the GL, the staff has determined that NMPC has provided the necessary information for the staff to complete its review.

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The NRC staff concludes that while cracking cannot be entirely ruled out, the NMP-2 core shroud is not likely to contain cracks which could compromise its structural integrity. The low water conductivity, short operational time, and use of low carbon materials minimize the potential for the initiation and growth of structurally significant cracks. The staff concludes that the licensee's materials based safety assessment of the NMP-2 shroud is sufficient to justify continued safe operation of the unit until the first refueling outage after NMP-2 surpasses 8 on-line years of operation without necessitating a detailed consequence analysis. However, per the reporting requirements of GL 94-03, the licensee shall submit, no later than 90 days prior to entering the outage in which the core shroud inspection is scheduled to occur, a detailed inspection scope for a more comprehensive examination of the NMP-2 shroud.

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

Docket No.: 50-410

Enclosure: Safety Evaluation

cc w/encl: See next page

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#### B. R. Sylvia

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Sincerely,

H.J. Binking

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

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cc w/encl: See next page

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B. Ralph Sylvia Niagara Mohawk Power Corporation

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