



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

April 30, 1999

Mr. John H. Mueller
Chief Nuclear Officer
Niagara Mohawk Power Corporation
Nine Mile Point Nuclear Station
Operations Building, Second Floor
Lycoming, NY 13093

SUBJECT: ALTERNATIVE REPAIR OF THE CORE SHROUD VERTICAL WELDS, NINE MILE POINT NUCLEAR STATION, UNIT NO. 1 (TAC NO. MA4701)

Dear Mr. Mueller:

By letter dated February 3, 1999, as supplemented by letter dated April 14, 1999, Niagara Mohawk Power Corporation (NMPC) described a repair plan for the core shroud vertical welds at Nine Mile Point Nuclear Station, Unit No. 1 (NMP1). The repair plan was submitted as a contingency which, subject to NRC staff approval, would be installed if needed based upon inspection results. The repair design is consistent with, and meets the guidelines of the Boiling Water Reactor Vessel and Internals Project's document BWRVIP-02, "Core Shroud Repair Design Criteria," as approved by the NRC staff in a safety evaluation (SE) dated September 29, 1994. Because the proposed core shroud repair is not included under the definition for repair or replacement specified in Section XI of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), NMPC requested that the NRC staff approve the proposed core shroud repair as an alternative repair pursuant to 10 CFR 50.55a(a)(3)(i).

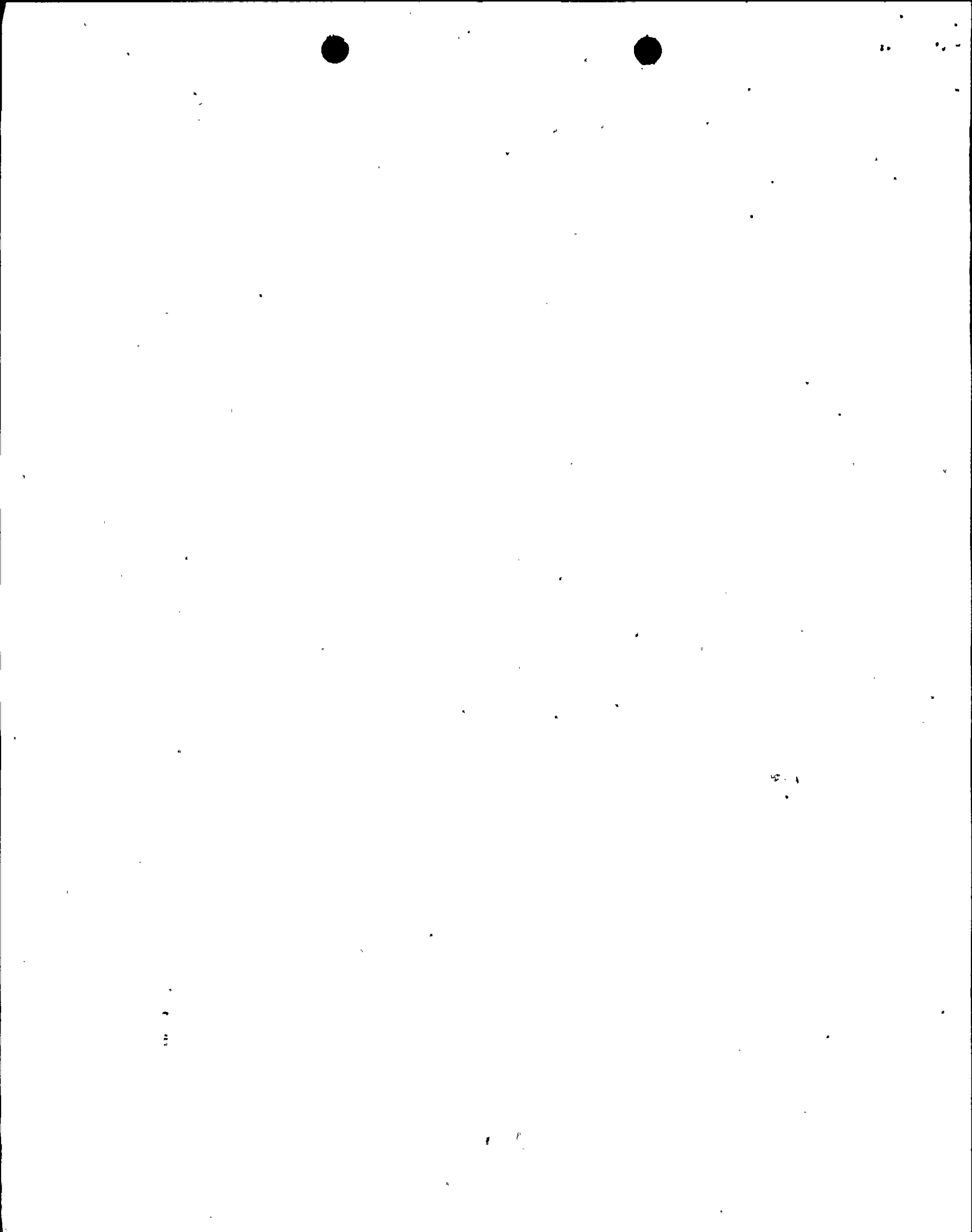
Your submittals address vertical welds V4, V9, and V10. The repair involves no welding of the core shroud. Rather, the repair is basically a clamp consisting of a plate with attached pins that are inserted into holes, machined in the shroud by the Electric Discharge Machining process, on both sides of the flawed vertical weld. The clamps bridge across the flawed vertical weld and transmit the pressure load normally transmitted through the vertical weld. Two clamps would be used for the V9 weld, two clamps for the V10 weld, and one clamp for the shorter V4 weld. The repair clamps can be installed on each weld independently; i.e., any one, two, or three welds can be repaired with these repair clamps.

The proposed repair had been designed as an alternative to the requirements of ASME Boiler and Pressure Vessel Code (ASME), Section XI. The NRC staff has reviewed the proposed alternative repair. The enclosure is our SE which concludes that the proposed repair plan provides an acceptable level of quality and safety and is acceptable in accordance with 10 CFR 50.55a(a)(3)(i).

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April 30, 1999

J. Mueller

- 2 -

If you have any questions regarding this matter, please contact Darl Hood by phone on (301) 415-3049 or by electronic mail at dsh@nrc.gov.

Sincerely,

Original signed by:

S. Singh Bajwa, Chief, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-220

Enclosure: Safety Evaluation

cc w/encl: See next page

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April 30, 1999

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Sincerely,

Original signed by:

S. Singh Bajwa, Chief, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

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If you have any questions regarding this matter, please contact Darl Hood by phone on (301) 415-3049 or by electronic mail at dsh@nrc.gov.

Sincerely,

A handwritten signature in cursive script that reads "S. Singh Bajwa". The signature is written in black ink and is positioned above the typed name.

S. Singh Bajwa, Chief, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-220

Enclosure: Safety Evaluation

cc w/encl: See next page



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Unit No. 1

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