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DESCRIPTION

Ltr. Ref 5-11-76 ltr, Furnishing A.I.I. information on the Feedwater Nozzle Inspection program to be started in the Spring of 1977...

(2 pages)

PLANT NAME: NINE MILE PT. UNIT # 1

ENCLOSURE

ACKNOWLEDGED

DO NOT REMOVE

SAFETY

FOR ACTION/INFORMATION

ENVIRO

JCM 17-77

ASSIGNED AD:		ASSIGNED AD:
BRANCH CHIEF:	<i>Leav.</i>	BRANCH CHIEF:
PROJECT MANAGER:	<i>Nowicki</i>	PROJECT MANAGER:
LIC. ASST. :	<i>Parkish.</i>	LIC. ASST. :

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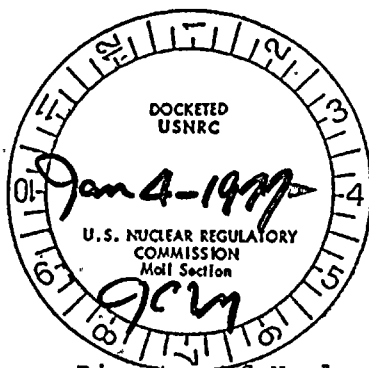
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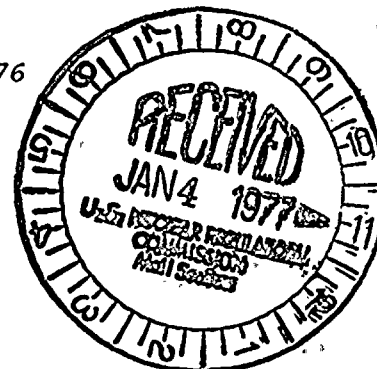
NIAGARA MOHAWK POWER CORPORATION

NIAGARA  MOHAWK

300 ERIE BOULEVARD WEST
SYRACUSE, N. Y. 13202



December 29, 1976



Director of Nuclear Reactor Regulation
Attn: Mr. George Lear, Chief
Operating Reactors Branch #3
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Re: Nine Mile Point Unit 1
Docket No. 50-220
DPR-63

Dear Mr. Lear:

As discussed in our May 11, 1976 letter, a feedwater nozzle inspection is planned during the Spring 1977 refueling at Nine Mile Point Unit 1. This letter provides additional information concerning the inspection program.

Plans and tooling development are in progress to effect removal of feedwater nozzle defects, cladding and a thin layer of base material should this become necessary, during this Spring 1977 outage. Criteria and supporting analysis for removal of defects, cladding and a thin layer of base material, as such removal affects reinforcement requirements, are being developed.

Ultrasonic examinations of the nozzle blend radii, bores and safe ends will be performed to establish a baseline for future verification of nozzle integrity. Additionally, dye penetrant inspections will be performed on all feedwater nozzles.

If feedwater spargers need replacement, they will be replaced with spargers of an improved design, which combines conservative features of the existing spargers with improvements to reduce thermal cycling at the nozzles. The replacement design will have a rectangular cross section with its attendant low velocity and resistance to vibration. The new spargers will be made of carbon steel.



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Each sparger will incorporate a piston ring seal section on the thermal sleeve to minimize bypass leakage. A moderate interference fit between the thermal sleeve and the nozzle will also be used.

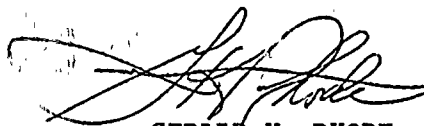
Flow shrouds will be used to prevent the mixing of reactor water with colder feedwater in the nozzle-thermal sleeve annulus and blend radius. A controlled leakage path via flow holes in the shrouds will be provided. The improved design has been discussed with the Nuclear Regulatory Commission staff on September 7, 1976.

Prior to implementation, this program will be reviewed by the Site Operations Review Committee and the Safety Review and Audit Board. In any case, the criteria for removal of defects, cladding and base material on the feedwater nozzles will be submitted to you by March 1, 1977.

A final report of the results of the inspection will be provided for information after completion of this outage.

Sincerely,

NIAGARA MOHAWK POWER CORPORATION



GERALD K. RHODE
Vice President - Engineering

MGM/sz

