

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

FILE NUMBER

TO: Mr. Benard C. Rusche

FROM: Niagara Mohawk Power Corp.  
Syracuse, New York  
Mr. Gerald K. Rhode

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12/29/76  
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1/3/77

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DESCRIPTION

Ltr. re our 6/25/76 ltr. and G.E.'s 9/30/76 and 12/21/76 ltrs....concerning Anticipated Transients Without Scram.

PLANT NAME: (2-P)  
Nine Mile Point #2

ENCLOSURE

**ACKNOWLEDGED**

**DO NOT REMOVE**

SAFETY		FOR ACTION/INFORMATION		ENVIRO 1/6/77	RJL
ASSIGNED AD:				ASSIGNED AD:	
<input checked="" type="checkbox"/> BRANCH CHIEF:	Varga (4)			BRANCH CHIEF:	
PROJECT MANAGER:				PROJECT MANAGER:	
<input checked="" type="checkbox"/> LIC. ASST. :	Service			LIC. ASST. :	

INTERNAL DISTRIBUTION						
<input checked="" type="checkbox"/> REG FILE		SYSTEMS SAFETY		PLANT SYSTEMS		SITE SAFETY &
<input checked="" type="checkbox"/> NRC PDR		HEINEMAN		TEDESCO		ENVIRO ANALYSIS
<input checked="" type="checkbox"/> I & E (2)		SCHROEDER		BENAROYA		DENTON & MULLER
OELD				LAINAS		
GOSSICK & STAFF		ENGINEERING	<input checked="" type="checkbox"/>	IPPOLITO		ENVIRO TECH.
MIPC		MACARRY		KIRKWOOD		ERNST
CASE		KNIGHT	<input checked="" type="checkbox"/>	H. ORNSTEIN		BALLARD
HANAUER		SIHWEIL		OPERATING REACTORS		SPANGLER
HARLESS		PAWLICKI		STELLO	<input checked="" type="checkbox"/>	V. Rooney
				THANANI		SITE TECH.
PROJECT MANAGEMENT		REACTOR SAFETY		OPERATING TECH.		GAMMILL
BOYD	<input checked="" type="checkbox"/>	ROSS (Ltr.)		EISENHUT		STAPP
P. COLLINS	<input checked="" type="checkbox"/>	NOVAK		SHAO		HULMAN
HOUSTON	<input checked="" type="checkbox"/>	ROSZTOCZY		BAER	<input checked="" type="checkbox"/>	D. DAVIS
PETERSON		CHECK		BUTLER		SITE ANALYSIS
MELTZ			<input checked="" type="checkbox"/>	GRIMES		VOLLMER
HELTEMES		AT & I	<input checked="" type="checkbox"/>	JENSEN	<input checked="" type="checkbox"/>	BUNCH
SKOVHOLT		SALTZMAN	<input checked="" type="checkbox"/>	MINDUS		J. COLLINS
		RUTBERG				KREGER

EXTERNAL DISTRIBUTION			CONTROL NUMBER
<input checked="" type="checkbox"/> LPDR: Oswego, N. Y.	NAT. LAB:		BROOKHAVEN NAT. LAB.
TIC:	REG V. IE		ULRIKSON (ORNL)
NSIC:	LA PDR		
ASLB:	CONSULTANTS:		
<input checked="" type="checkbox"/> ACRS /6 CYS HOLDING/SENT	Car. B. (1/6/77)		

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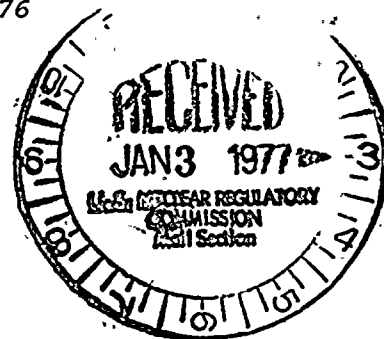
NIAGARA MOHAWK POWER CORPORATION

NIAGARA  MOHAWK

300 ERIE BOULEVARD WEST  
SYRACUSE, N.Y. 13202

December 29, 1976

Mr. Benard C. Rusche, Director  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555



Re: Nine Mile Point Unit 2  
Docket No. 50-410

Dear Mr. Rusche:

In response to Mr. R. Boyd's letter of June 25, 1976, Niagara Mohawk Power Corporation proposes to resolve the issue of Anticipated Transients Without Scram by installation of an Alternate Reactor Scram System at Nine Mile Point Unit 2. The General Electric "BWR Scram System Reliability Analysis Report" dated September 30, 1976, provides a detailed description of the Alternate Reactor Scram System equipment and testing program.

The Nuclear Regulatory Commission criterion for resolution of this concern requires a demonstration that the scram system reliability is such that the probability of failure to scram is approximately  $10^{-7}$  per year. The Alternate Reactor Scram System provides diverse and redundant hardware for those portions of the scram system where the most significant contribution to reliability can be achieved. Incorporation of an Alternate Reactor Scram System reduces the probability of failure to scram to approximately  $4 \times 10^{-8}$  per year. In addition, modification of the scram system provides optimum protection from common mode failures.

As indicated by the December 21, 1976 General Electric letter to the Nuclear Regulatory Commission, resolution of Anticipated Transients Without Scram by mitigation would require an expenditure of approximately \$28,000,000 per plant. This estimate does not include increased fuel costs and other allowances for funds during construction which may be attributable to delays in plant operation. Conversely, the cost for implementation of the Alternate Reactor Scram System is expected to be less than \$500,000 per plant.



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THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

5300 S. DICKINSON DRIVE

CHICAGO, ILL. 60637

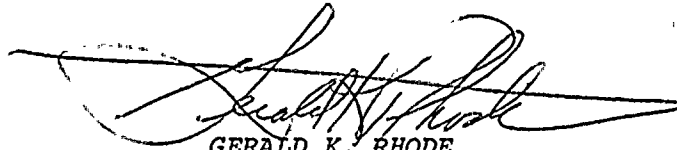


PHYSICS 309

In summary, we believe that acceptable reliability can be demonstrated by installation of an Alternate Reactor Scram System and that mitigating systems are unnecessary. We concur with the Nuclear Regulatory Commission in its desire to resolve the Anticipated Transients Without Scram as soon as practical, and we remain available to discuss our proposal for resolution. Upon receipt of your concurrence with our proposal, we will proceed with the detailed design and implementation necessary to ensure the required scram reliability.

Sincerely,

NIAGARA MOHAWK POWER CORPORATION



GERALD K. RHODE  
Vice President - Engineering

WRD/sz

