

SEP 25 1973

Docket No. 50-220

Niagara Mohawk Power Corporation  
ATTN: Mr. Philip D. Raymond  
Vice President - Engineering  
300 Erie Boulevard West  
Syracuse, New York 13202

Gentlemen:

This is to confirm our telephone conversation with Mr. P. A. Burt, General Superintendent, Nuclear Generation, on September 18, 1973, regarding the possibility of inverted poison tubes in the control rods at the Nine Mile Point Nuclear Station Unit 1 (NMP-1). It was agreed that in the event of an unscheduled shutdown of NMP-1 within the next 90 days, you would conduct shutdown margin tests on all control rods to verify that the minimum shutdown margin is at least 0.0075 delta k/k at cold, xenon-free, operating samarium conditions. It is expected that these tests will be performed making adequate allowance for the shutdown worths of xenon and samarium. In the absence of an unscheduled shutdown, you are requested to schedule a shutdown to perform these shutdown margin tests within 90 days from the date of this letter. You are requested also to provide this office with a written report of the results of these tests within 10 days of their completion. If any anomaly is found, report in accordance with the requirements of the Technical Specifications of License No. DPR-17 for NMP-1.

Successful completion of these shutdown reactivity margin measurements assures that an adequate shutdown margin exists at the time of the measurement. Our review of the inverted poison rod occurrence indicates that insufficient data exists to conclude that further poison redistribution cannot occur. Therefore, you are requested to submit the following information for our review: (1) analyses of possible length and location of poison voids which could be caused by boron carbide redistribution, (2) the effect of such redistribution on normal operation, transients, and accidents, (3) proposed changes to technical specifications which will assure that all safety margins stated or implied in your FSAR are maintained, (4) surveillance requirements to maintain adequate shutdown reactivity margins and monitor changes in poison distribution, (5) your plans and schedules for changeout of control rods, and (6) expected curve of reactivity vs burnup for remainder of current operating cycle.



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Copies of the "Reactor Control Blade Evaluation" special report and supplement submitted by The Millstone Point Company along with our reply and safety evaluation are enclosed to serve as guidance in the preparation of your submittal. It is requested that any proposed changes within your Technical Specifications to account for poison redistribution in inverted poison tubes be implemented upon submittal pending completion of our review of your proposed changes. Your response in this area is requested within 45 days from the date of completion of the initial shutdown margin testing and should be submitted as three signed and thirty-seven additional copies.

Sincerely,

Original Signed by  
D. J. Skovholt

Donald J. Skovholt  
Assistant Director for  
Operating Reactors  
Directorate of Licensing

Enclosures:

1. Millstone ltrs dtd 7/23 & 7/26/73 transmitting Reactor Control Blade Evaluation and Supplement
2. AEC ltr to Millstone dtd 7/27/73 and Safety Evaluation

Distribution  
Docket File

AEC PDR  
Local PDR  
RP Reading  
Branch Reading  
JRBuchahan, ORNL  
DJSkovholt, L:OR  
TJCarter, L:OR  
ACRS (16)  
RO (3)  
OGC  
DLZiemann, L:ORB #2  
CJDeBevec, L:ORB #2  
RMDiggs, L:ORB #2  
~~SKarl, L:RP~~

cc w/enclosures:

J. Bruce MacDonald, Esquire  
Deputy Commissioner and Counsel  
New York State Department of  
Commerce and Counsel to the  
Atomic Energy Council

Arvin E. Upton, Esquire  
LeBoeuf, Lamb, Leiby & MacRae

Dr. William Seymour  
Staff Coordinator  
New York State Atomic Energy Council  
New York State Department of Commerce

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SURNAME ▶	CJDeBevec:sjh	RMDiggs	DLZiemann	DJSkovholt		
DATE ▶	9/25/73	9/24/73	9/25/73	9/25/73		

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