

CONTROL NO: 2627 -

FROM: Niagara Mohawk Power Corporation Syracuse, N. Y. 13202 Philip D. Raymond	DATE OF DOC: 4-19-73	DATE REC'D 4-20-73	LTR X	MEMO	RPT	OTHER
TO: Mr. Skovholt	ORIG 3 signed	CC	OTHER	SENT AEC PDR X SENT LOCAL PDR X		
CLASS: <u>U</u> PROP INFO	INPUT	NO CYS REC'D 40	DOCKET NO: 50-220			
DESCRIPTION: Ltr notarized 4-19-73, furnishing addl info to their 1-31-73 ltr containing a description of a hydrogen "getter" located in the upper plenum of the fuel rods in Type 4 reload fuel.....		ENCLOSURES:				
PLANT NAMES: Nine Mile Point Unit 1		Do Not Remove ACKNOWLEDGED				

Do Not Remove
ACKNOWLEDGED

FOR ACTION/INFORMATION 4-23-73 AB

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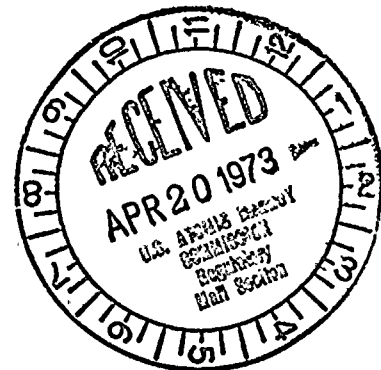
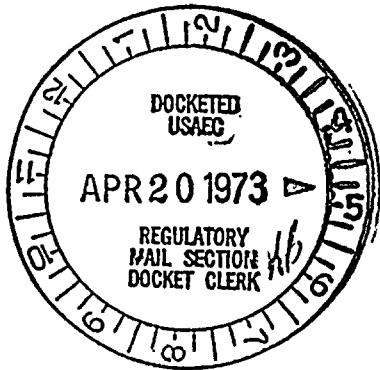
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NIAGARA MOHAWK POWER CORPORATION

NIAGARA  MOHAWK300 ERIE BOULEVARD WEST
SYRACUSE, N. Y. 13202

April 19, 1973



Mr. Donald J. Skovholt
Assistant Director for Operating Reactors
Directorate of Licensing
United States Atomic Energy Commission
Washington, D. C. 20545

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

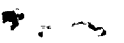
Dear Mr. Skovholt:

Niagara Mohawk's letter of January 31, 1973, contained a description of a hydrogen "getter" located in the upper plenum of the fuel rods in Type 4 reload fuel. This communication documents information previously provided to the Commission Staff for its review of the Type 4 reload fuel.

A hydrogen getter is located in the upper plenum of each fuel rod in the Type 4 fuel. The hydrogen getter is an added precaution against clad hydriding that might result from incomplete removal of hydrogen impurities in the fuel rod during fabrication; extraneous hydrogen impurities will combine chemically with the getter in preference to zircaloy cladding. The getter is composed of chips of a zirconium alloy located in a stainless steel container in the upper plenum. Extensive testing has shown that the getter is effective for temperatures beyond the range anticipated for a BWR fuel rod plenum and will not release hydrogen during normal operation, or under transients or accident conditions. The getter material chip size has been selected such that the getter will not undergo a chemical reaction contributing to the severity of transients and accidents.

The getter operating conditions are defined by the coolant temperature at the plenum area of the rod. Under normal operation conditions the plenum temperature is between 550 F to 600 F. During abnormal transients or accident conditions the plenum region temperatures would range from 300 F to 600 F. The getter chips are inactive below 450 F and active in adsorbing and retaining hydrogen from 450 F to

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Mr. Donald J. Skovholt

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April 19, 1973

beyond 600 F. The corrosion products of these reactions are confined within the stainless steel jacket containing the getter. The rate of reaction of the getter with air, steam or hydrogen is not pyrophoric in the temperature range experienced in a BWR fuel rod. Therefore, the getter will combine chemically with extraneous hydrogen during normal operation, and not release hydrogen or otherwise contribute to the severity of abnormal transients or postulated accidents.

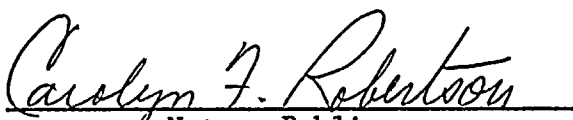
Very truly yours,



Philip D. Raymond
Vice President-Engineering

PDR/vk

Subscribed and sworn to
before me this *19th* day
of April 1973.


Notary Public

CAROLYN F. ROBERTSON
Notary Public in the State of New York
Qualified in Onon. Co. No. 34-8599123
My Commission Expires March 30, 19*74*

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that this is crucial for the company's financial health and for providing reliable information to stakeholders.

2. The second part of the document outlines the procedures for recording transactions. It details the steps involved in the accounting process, from identifying a transaction to recording it in the appropriate ledger.

3. The third part of the document discusses the importance of reconciling accounts. It explains how regular reconciliations help to ensure that the company's records are accurate and up-to-date.

4. The fourth part of the document discusses the importance of maintaining proper documentation. It emphasizes that all transactions should be supported by appropriate evidence, such as invoices and receipts.

5. The fifth part of the document discusses the importance of reviewing and auditing the records. It explains how regular reviews and audits help to identify any errors or discrepancies and to ensure that the company's records are accurate and reliable.