

NIAGARA MOHAWK POWER CORPORATION

NIAGARA MOHAWK

Nine Mile Point Nuclear Station
Post Office Box 32
Lycoming, New York 13093

December 13, 1971

Dr. Peter A. Morris, Director
Division of Reactor Licensing
United States Atomic Energy Commission
Washington, D. C. 20545

Dear Dr. Morris:

Re: Provisional Operating License DPR-17
Docket No. 50-220

During a routine examination of various components of the Nine Mile Point Nuclear Station turbine, the seats of all nine by-pass valves were found to be cracked. These seats are fabricated of 2 1/4 Cr - 1 Mo (B50A179) alloy steel forgings having a stellite inlay fused into the seat at point of contact with the disc. The cracking was confined to the stellite insert running radially between the fusion lines and across the insert.

The stellite insert was removed entirely and a new weld prep machined into the seat. After liquid penetrant inspection, the seats were welded with a much more ductile austenitic stainless steel electrode, 25 Cr - 20 Ni (AWS A5.4 Clas E310) to fill the weld prep. They were machined to contour and reinstalled in the valve chest after passing another liquid penetrant test.

Three of the valve discs were found by liquid penetrant testing to have several tight cracks. These were removed by light machining. They will be inspected again at the next outage in April 1972.

Very truly yours,

P. Allister Burt
P. Allister Burt
Station Superintendent

PAB:pw

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Q PDR



LK-1/5
PC 1/5
RE-1/2
JK-1/4
RC-1230
RM-1/11
JN-1/2

50-220
Inquiry
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