NIAGARA MOHAWK POWER CORPORATION

NIAGARA MOHAWK

300 ERIE BOULEVARD WEST
SYRACUSE, N.Y. 13202

October 26, 1973

Mr. Donald J. Skovholt
Assistant Director for Reactor Operations
Division of Reactor Licensing
United States Atomic Energy Commission
Washington, D. C. 20545

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

Dear Mr. Skovholt:

On October 18, 1973, the Nine Mile Point Unit #1 reactor was shut down, the result of an increasing rate of unidentifiable leakage in the drywell.

The shutdown, which occurred during the routine RO:I AEC Inspection, provided the opportunity to perform the following:

1. Shutdown Margin Demonstrations - in accordance with your letter[1] dated September 25, 1973.

2. Inspections of hydraulic shock suppressors in response to your request on October 1, 1973[2] and RO:I telephoned request[3] on July 26, 1973.

3. The leak test of the manhole cover on the drywell which was committed in our letter of October 10, 1973[4] in response to your letter of September 28, 1973[5].

On August 17, 1973 leakage into the Drywell Floor Drain Tank (DWFDT) had increased to 2.5 gpm. Reactor Recirculation Pump 12 (RRP 12) was the immediate suspect as equalization was occurring between the low and high pressure seal. Once RRP 12 was secured the DWFDT leakage decreased to less than .25 gpm.

On October 1, 1973, with RRP 12 still secure leakage again was gradually increasing to the DWFDT. With leakage approaching 2.8 gpm on October 6, 1973 Station Supervision ordered increased surveillance on the DWFDT leakage. Although Technical Specifications call for a check of leakage only once per day, it was deemed necessary to continually plot leakage each hour to note trends or other indications which could provide an insight into the source of leakage. The Radiation Protection and Chemistry section had already determined that the major percentage of leaking liquid was not reactor coolant. On October 18, 1973 with DWFDT leakage indicating approximately 4.5 gpm, Plant Supervision ordered the reactor shutdown. During the subsequent drywell inspection the source of leakage was identified as steam leaks thru the valve packing on two electromatic relief systems blocking valves and a small leak on RRP 12 seal.

Mr. Donald J. Skovholt
U.S. Atomic Energy Commission

October 26, 1973

During the shutdown and at Xenon free condition the shutdown margin demonstrations were performed. All control rods were verified to meet the minimum shutdown margin of 0.0075 delta k/k at cold, xenon free, operating samarium conditions. A complete report including responses to your question is being readied and will be sent to you prior to December 4, 1973 as outlined in your letter[1].

An inspection of the hydraulic shock suppressors was made during the shutdown. Enclosure 1 to this letter details the manufacturer, number of snubbers, identification of low fluid reservoirs, and corrective actions taken. In summary, no defective seals were found and no shock suppressors were found to be void of fluid. A certain amount of leakage was found from a few suppressors, the result of loose reservoir connections.

Also during the shutdown, the manhole cover on the drywell was leak tested. The penetration was pressurized to 35 psig and the decay in pressure noted over one half hour. No loss of pressure was observed.

Very truly yours,

Rudolph R. Schneider

Rudolph R. Schneider
Vice President - Electric Operations

RRS:cm

1. Ltr. Skovholt - Raymond Sept. 25, 1973
2. Ltr. Skovholt - Raymond Oct. 1, 1973
3. Tph. Cantrell - Perkins July 26, 1973
4. Ltr. Schneider- O'Reilly Oct. 10, 1973
5. Ltr. Skovholt - Schneider Sept. 28, 1973

ENCLOSURE 1

HYDRAULIC SHOCK SUPPRESSOR

1. Manufacturer: All Grinnell Manufacturer

2. Number of Snubbers: 110 Fluid SF-96-1000

3. Where fluid was added the connection that was leaking was tightened.

4.

Serial #	System	Condition	Corrective Action
1367- D2	* Elec.Vent Lines	Good	
1438- D2	Elec.Vent Lines	Good	
1188- D2	Elec.Vent Lines	Good	
1195- D2	Elec.Vent Lines	Good	
1463- D2	Elec.Vent Lines	Good	
1372- D2	Elec.Vent Lines	Good	
1340- D2	Elec.Vent Lines	Good	
1207- D2	Elec.Vent Lines	Good	
1459- D2	Elec.Vent Lines	Good	
1200- D2	Elec.Vent Lines	Good	
1454- D2	Elec.Vent Lines	Good	
1491- D3	Elec.Vent Lines	Good	
1344	Elec.Vent Lines	Good	
1450- D2	Elec.Vent Lines	Good	
1488- D3	Elec.Vent Lines	Good	
1495- D3	Elec.Vent Lines	Low oil in Res.	Added Fluid
1026- D3	Elec.Vent Lines	Good	
1028- D3	Elec.Vent Lines	Good	
1494- D3	Elec.Vent Lines	Low oil in Res.	Added Fluid
1217- D2	Elec.Vent Lines	Good	
1350- D2	Elec.Vent Lines	Good	
1379- D2	Elec.Vent Lines	Good	
1215- D2	Elec.Vent Lines	Good	
1349- D2	Elec.Vent Lines	Good	
1359- D2	Elec.Vent Lines	Good	
		Good	
381	Rx. Recir. System	Low oil in Res.	Added oil
373	Rx. Recir. System	Good	
388	Rx. Recir. System	Good	
384	Rx. Recir. System	Low oil in Res.	Added oil
390	Rx. Recir. System	Low Oil	Added oil
415	Rx. Recir. System	Low oil	Added oil
413	Rx. Recir. System	Low oil	Added oil
379	Rx. Recir. System	Low oil	Added oil
392	Rx. Recir. System	Low oil	Added oil
378	Rx. Recir. System	Low oil	Added oil
1088	Rx. Recir. System	Good	
1015	Rx. Recir. System	Good	
1016	Rx. Recir. System	Good	
1004	Rx. Recir. System	Good	
1010	Rx. Recir. System	Good	
1005	Rx. Recir. System	Good	

* Electromatic relief discharge piping to the Torus.

ENCLOSURE 1

Serial #	System	Condition	Corrective Action
124	Rx. Recirc. System	Good	
140	Rx. Recirc. System	Good	
118	Rx. Recirc. System	Good	
137	Rx. Recirc. System	Good	
86	Rx. Recirc. System	Good	
86	Rx. Recirc. System	Good	
101	Rx. Recirc. System	Good	
136	Rx. Recirc. System	Good	
120	Rx. Recirc. System	Good	
141	Rx. Recirc. System	Good	
383	Rx. Recirc. System	Good	
389	Rx. Recirc. System	Good	
375	Rx. Recirc. System	Good	
418	Rx. Recirc. System	Good	
391	Rx. Recirc. System	Good	
1017	Rx. Recirc. System	Good	
1006	Rx. Recirc. System	Good	
1007	Rx. Recirc. System	Good	
1014	Rx. Recirc. System	Good	
1012	Rx. Recirc. System	Good	
1011	Rx. Recirc. System	Good	
	Rx. Recirc. System	Good	
1008	Rx. Recirc. System	Good	
1025	Rx. Recirc. System	Good	
1022	Rx. Recirc. System	Good	
40-SC-47	Core Spray System	Good	
40-SC-10	Core Spray System	Good	
1760	Core Spray System	Good	
40-SC-8	Core Spray System	Good	
40-SC-7	Core Spray System	Good	
2582	Core Spray System	Good	
40-SC-28	Core Spray System	Good	
40-SC-27	Core Spray System	Good	
40-SC-26	Core Spray System	Good	
40-SC-25	Core Spray System	Good	
1368	Main Steam	Good	
1369	Main Steam	Good	
	Main Steam	Good	
	Main Steam	Good	
1367	Main Steam	Good	
1370	Main Steam	Good	
	Main Steam	Good	
	Main Steam	Good	
31-SC-6	Feedwater System	Good	
31-SC-3	Feedwater System	Low oil	Added oil
1760	Feedwater System	Good	
31-SC-5	Feedwater System	Low oil	Added oil
31-SC-4	Feedwater System	Low oil	Added oil
1761	Feedwater System	Good	
2189	Clean-Up System	Good	
2370	Clean-Up System	Good	
2293	Clean-Up System	Good	
1703	Clean-Up System	Good	
1789	Clean-Up System	Good	

ENCLOSURE 1

Serial #	System	Condition	Corrective Action
2167	Clean-Up Discharge	Low oil	Added oil
29-SC-3	Clean-Up Discharge	Good	
2189	Shutdown Cooling Suct.	Good	
2164	Shutdown Cooling Suct.	Good	
2190	Shutdown Cooling Disc.	Good	
2176	Emerg.Cond.Return	Low oil	Added oil
2182	Emerg.Cond.Return	Good	
1219- D2	Emerg.Cond.Return	Good	
21-27	Emerg.Cond.Return	Good	
2129	Emerg.Cond.Return	Good	
2126	Emerg.Cond.Return	Good	
39-SC-15	Emerg.Cond.Return	Good	
2128	Emerg.Cond.Return	Good	
2227	High Press Flange Leakoff	Good	

5. Most of the leaks were found at the reservoir end caps. These were tightened and where necessary teflon tape was used in connections.

In general, there were no inoperable hydraulic shock suppressors.