UNITED STATES
ATOMIC ENERGY COMMISSION
DIVISION OF COMPLIANCE
REGION I
970 BROAD STREET
NEWARK, NEW JERSEY 07102

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LK 3940

DEC 10 1971

TELEGRAM - CONFIRMATION
TRANSMITTED DECEMBER 9, 1971

Niagara Mohawk Power Corporation
ATTN: Mr. F. J. Schneider,
Vice President - Operations
300 Erie Boulevard West
Syracuse, New York 13202

Docket No. 50-220

Gentlemen:

We recently received information from the Florida Power & Light Company of an occurrence during preoperational testing of the Turkey Point 3 Westinghouse pressurized water reactor that may relate to performance of the steam supply system at your facility. The information is as follows:

> During hot functional testing of the unfueled reactor, three of four relief valves were catastrophically ejected from two main steam line headers, to which they were mounted. The failed headers were 12-inch diameter, spool pieces fabricated by the Dravo Corporation, Marietta, Ohio, from Schedule 60 (.562-inch wall thickness) A106, Grade B carbon steel pipe manufactured by U. S. Steel, Lorain Works, Lorain, Ohio, mounted horizontally, 180° from each other, on the two sides of the main steam line. The headers were hydrostatically tested at 1356 psig under cold conditions prior to hot functional testing. On one side of the main steam line, the failure occurred in the vicinity of the heat affected zone of the weld which joins the riser to the header and appears to be largely confined to the 12-inch header. On the other side of the main steam line, the failure apparently originated in a similar manner and propagated through the pipe header causing catastrophic damage to the header assembly. The secondary system was at 990 psig and 545° F and the primary system at 2232 psig and 546.6° F at the time of the header failure. These systems had been at their respective pressures and temperatures for nine days. No transient conditions were reported to have existed in these systems at the time of failure.

The failed header assemblies each consist of two valves mounted vertically in a dead-end, 12-inch diameter pipe projecting at a 90° horizontal angle from the main steam line. The two headers are mounted at 180° to each other on the opposite sides of the main steam line. The headers were designed to meet Section I of the ASME code by the Bechtel Corporation.

For your reactors which are licensed to operate, it is requested that you provide this office within 10 days, in writing, as to whether headers as described above are installed in the steam lines of your facility.

Should you have any questions concerning this matter, we will discuss them with you.

Very truly yours,

James P. O'Reilly
Director

cc: Mr. P. A. Burt, Station Superintendent

bcc: A. Giambusso, CO
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R. Engelken, CO
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