



TO: Nuclear Regulatory Commission

FROM: Jane Lee, 183 Valley Rd. Etters, PA 17319

RE: Steam Generator Tubes: Unit I
Primary Coolant Break (7-9-83)
GPU Public Meeting at Middletown (7-6-83)

Recent events and revelations by Robert Arnold during a public meeting require close scrutiny by the NRC Commissioners.

1. GPU meeting of 7-6-83...Bob Arnold and Clark in attendance.
2. Bob Arnold revealed:
 - (a) Thiosulphate was injected into Unit 1's sprinkling system then sprayed inside the containment bldg. to wash down radioactive iodine.
 - (b) The thiosulphate, a high corrosive substance, entered the primary coolant system attacking the generator tubes.
 - (c) The last maintenance check made on the generator tubes was sometime prior to the last refueling.
 - (d) The damaged tubes were discovered on Thanksgiving Day of 1981.

Questions:

- (a) How did the thiosulphate enter the closed primary coolant system when the sprinkling system is located close to the top of the reactor building?
- (b) Why were the levels of iodine sufficiently high enough to warrant a thiosulphate bath of Unit 1's interior?

- (c) How high were the levels of iodine?
- (d) What is the present metallurgical characteristics of the primary coolant pipes or any other metal touched by this sulphuric chemical?
- (e) What other corrosive chemicals could be a contributing cause to this metallurgical breakdown?
- (f) Are the primary and secondary coolant pipes comprised of safety grade material or is this another failure of many already addressed relating to a quick fix and short cuts ?

During questions and answers on 7-6-83 with Bob Arnold and Mr. Clark we learned about the thiosulphate cause and effect. We knew it existed but never why.

Three days later (7-9-83) we read in our local paper about a reactor primary coolant break at Unit I during attempts to purge thiosulphate from the primary coolant system. It's interesting indeed that the generator tubes were repaired some time ago but only after intensive questioning at a public meeting do we witness a rush to clean out the primary coolant system.

- (a) With thiosulphate circulating through the coolant system, doesn't it raise questions about inner-granular deterioration? If so, how great will it be over such a long period?
- (b) If a break can occur during a cleanup, what will happen under pressure?

This is too important to leave to engineering sycophants and a licensee who's integrity is now in question.

On 2-28-83 concrete chips were taken from Unit 1's reactor bldg. and sent for lab. tests.

- (a) What was the purpose of these tests and what were the results?

Mr. Clark from GPU was also fielding answers and questions at the (7-6-83) meeting and revealed:

- (a) The steam generator tubes are as good as new ones.
- (b) The steam generators will be brought to full pressure testing.
- (c) Sections of the generator tubes were taken for testing.
- (d) Over 100 modifications were made to Unit 1 and it is ready for restart. Mr. Clark took issue with Commissioner Gilinsky's recent charges of noncompliance.

Questions:

- (a) Can metal exposed to thiosulphate, fractures and various corrosive chemicals sustain equal value as those originally manufactured?
- (b) How risky is the operation of these steam generator tubes under full pressure in view of this most recent break in the primary system?
- (c) What were the results of the tube section testing?
- (d) I distinctly recall reading many requests, written by Robert Arnold, seeking extensions and exemptions from the NRC Staff.

In Saturday's paper (7-9-83) Doug Bedell was quoted as saying:

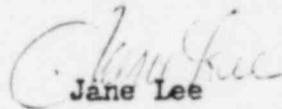
- (a) "Hot functional testing is expected to begin about a month from now and continue for a month".
- (b) "GPU reported the auxiliary building spill to the NRC and local and state emergency management officials yesterday even though it was not classified as an unusual event and notification was not required by law".

When did the NRC appoint Doug Bedell to the decision-making process? Or has the Commission already made the decision to start the steam generators? Mr. Bedell persists in acting as P.R. for GPU and play^{ing} the role of GPU apologist.

The Commission's image isn't all that great without resorting to putting its neck on the chopping block for GPU.

This writer wishes to caution those Commissioners who persist in ignoring the danger of restarting this plant and who are blindly moving ahead toward restart. Hendrie said it better than me: "We are like blind men stumbling around in the dark". To ignore this warning after all the evidence clearly reveals serious shortcomings with management integrity as well as mechanical failures, is sheer folly.

Sincerely,


Jane Lee

cc: Morris Udall

Commissioner Gilinsky:

Thought you might find this interesting.

Patriot

Blamed on Fallout

HARRISBURG, PA., DECEMBER 26, 1976

Isotopes Found In Area Again

BY JOHN M. BAER
Staff Writer

Concentrations of radioactive isotopes well above normal background levels have been detected in the Susquehanna River near the Three Mile Island Nuclear Power Plant south of Harrisburg.

State and federal officials said the levels pose no threat to public safety.

The Metropolitan Edison Co. (Met Ed) of Reading, operators of the plant, reported the findings to the U.S. Nuclear Regulatory Commission (NRC) last week, and attributed the abnormal readings to fallout from two Chinese atomic bomb tests in September and November.

The levels were found in sediment from the riverbed at a site 1 1/2 miles south of the plant, according to a company spokesman.

State officials were not notified about the findings.

Although a press release from the company said levels detected are 10 times above background levels, two of the nine isotopes found were 30 to 34 times normal readings.

Robert C. Arnold, Met Ed's vice president for generation, told The Patriot that the press release, which was dated Dec. 23, contained "a poor choice of words," and said levels of cerium 141 were recorded at 34 times normal levels and lanthanum was found to be "about 30

times" higher than background readings.

Arnold said nine separate radioactive isotopes were detected, including iodine 131 and cobalt 58. He said the elements found provide no indication that they came from the power plant, adding that while the plant produces most of the isotopes detected, there would have been greater quantities of cobalt if there

Active Isotopes Discovered

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had been a fuel leak at the site. NRC officials said the company is required to report any readings in sediment which exceed 10 times normal levels. While the company is not required to notify state officials of such findings, Arnold said Met Ed generally does so as a courtesy and added that the state was not told this time because of "an oversight."

An NRC spokesman said the company findings will be analyzed by the agency. He added he believes the sediment report is the first such report from a nuclear plant filed since the fallout incidents.

Margaret A. Reilly, the state's chief of environmental surveillance,

said state officials have not conducted any sediment tests since the fallout incidents.

Met Ed and the NRC indicated that high levels of radioactive isotopes can be expected for some time in areas of waterways where flow is less than rapid. The sediment in such areas, they said, collects materials which are washed downstream.

Reilly said it is unlikely that any aquatic life affected by the isotopes would pose a health threat if eaten.

Karl Abraham, an NRC spokesman, said the findings simply confirm the fact that radioactivity from the recent fallouts "is still with us, will be with us for a long time and there is nothing we can do about it."

Abraham's fairy tales are still with us.
fallout indeed!

'Mildly Radioactive'

Water Spilled in TMI's Unit 1

4-9-83
About 500 gallons of mildly radioactive water spilled onto the floor inside the Three Mile Island Unit 1 auxiliary building yesterday.

No workers at the nuclear power plant were contaminated by radiation as a result of the incident, according to a spokesman for GPU Nuclear Corp., operator of the facility.

All but a few gallons of the spilled water drained into a sump, where it remained last night. It will be routinely decontaminated for use within the plant, GPU spokesman Doug Bedell said.

Monitors in the auxiliary building detected no increase in radioactivity inside the concrete structure after the spill, Bedell said. The building houses supplementary systems associated with Unit 1's reactor coolant system.

Bedell said the leak occurred when plant workers were switching from the use of one reactor cool-

ant pump to another during a chemical cleanup of the reactor coolant system.

A filter became clogged during the operation and increased the water pressure in an instrument line, which then broke, allowing the water to spill out. A plant operator working in the auxiliary building spotted the break and workers stopped the leak.

The coolant system for the shutdown Unit 1 reactor is being cleaned to remove any possible traces of the sulphur that led to corrosion of the Unit 1 steam generator tubes, Bedell said.

The cleanup is in preparation for hot functional testing of the

GOOD MORNING

Just about the time a woman thinks her work is done, she becomes a grandmother.

Unit 1 reactor, in which plant systems will be subject to operational temperatures and pressures without actually starting the reactor. Hot functional testing is expected to begin about a month from now and continue for another month, Bedell said.

The U.S. Nuclear Regulatory Commission is considering whether to lift its suspension of the operating license for Unit 1, which was shutdown for refueling during the March 28, 1979, accident at its sister plant, TMI Unit 2, and has remained shutdown by NRC order since then.

Bedell said GPU reported the auxiliary building spill to the NRC and local and state emergency management officials yesterday, even though it was not classified as an unusual event and notification was not required by law.

"It's not much of an incident, but we're reporting it," Bedell said.

Bedell said