



September 24, 1982

PNS-LI-82-411

SEP 28 11:01

Mr. James P. O'Reilly
Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

REPORTABLE OCCURRENCE 335-82-45
ST. LUCIE UNIT 1
DATE OF OCCURRENCE: SEPTEMBER 13, 1982
UNPLANNED RELEASE

On September 13, 1982, it was suspected that sewage plant sludge containing low levels of radioactive material had been disposed of improperly. Through the sludge-disposal contractor's (EPA required) records, the exact dumping areas were located and on September 15, 1982 the presence of low level contamination in the dumping area was confirmed (by sample analysis).

Although the amounts are such that we find no firm reporting requirement, this is an item of public interest and has been reported (verbally) to the NRC. The attached Licensee Event Report is being submitted in accordance with Technical Specification 6.9 to provide notification of the subject occurrence.

Very truly yours,

J. W. Williams, Jr.
Vice President
Nuclear Energy

PLP/mbd

Attachment

cc: Director, Office of Inspection and Enforcement (40)
Harold F. Reis, Esquire
File 933.1 SL

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EVENT-CONTINUED

A wash trough, located in the RCA but draining to the sanitary system, has been used since 1978 for decontaminating respirators and similar items. The sink clogged up and maintenance personnel clearing the drain suspected it did not drain to a radioactive waste system. The sink was placed out of service until the drain path could be verified (and is still out of service). On September 13, the sink was verified to be piped to the sanitary sewer system. It should be noted that the plant staff has isolated this sink several times when the radioactive waste holdup tanks were near full due to their conviction it drained to that system. Before December, 1979 the sink drained to a sept tank. During times of heavy usage such as outages, the tank liquid contents were pumped out and dumped by a contractor in an EPA approved site. Since that time the system has gone to an on-site sewage treatment plant. Twice, loads of sludge from the plant settling tank have been disposed of in the same manner.

The sewage plant effluent is routinely sampled and has shown less than MDA. The sewage plant appears to be very effective at settling out and thus concentrating any particulate/insoluble activity.

CAUSE-CONTINUED

The design assumed the sink would be used for personal cleanup only, as are similar sinks in locker rooms and machine shops. The present Health Physics staff was informed that the radioactive waste systems were traced by their predecessors. (There was essentially 100% turnover in the HP staff between startup in 1976 and 1978 when the sink was first normally used for decontamination.) This sink is out of service and the drain will be rerouted before any further use. Other similar facilities in the RCA have been verified to be properly routed. Floor drains in the RCA are being physically verified. It should be noted that this was a design error and the other drains are shown on design drawings to be properly routed. The contractor's dump site has been surveyed by company, state, and NRC personnel. Detailed surveys are still in progress. Some dirt has been removed (about 6 inches from an area 20 by 60 feet) and spot removals are continuing. Using the (state's) highest reported value (to date) for the removed area, it contained about 0.001 curie. Spectral analysis to date indicates the majority of the activity is (insoluble) cobalt 60 which presents no leaching or transport hazards. Pond and ground water samples showed no activity above background and no cobalt 60.

A follow-up report will be issued.