



UNITED STATES
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
WASHINGTON, D.C. 20545

APR 20 1976

Mr. Carlton Kammerer, Director
Office of Congressional Affairs
Nuclear Regulatory Commission
1717 H Street, NW.
Washington, D.C. 20555

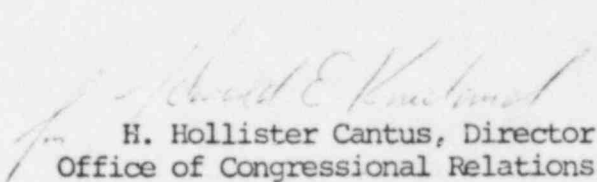
Dear Mr. Kammerer:

Enclosed is correspondence from Dr. Thomas J. Ratchford regarding an inquiry from Congressman William Lehman to Congressman Mike McCormack.

Since the nature of this inquiry relates to the activities of the Nuclear Regulatory Commission rather than the Energy Research and Development Administration, it is requested that proper action be taken by your office.

We are advising Dr. Ratchford of this referral by copy of this letter.

Sincerely,


H. Hollister Cantus, Director
Office of Congressional Relations

Enclosure:
As stated

cc: Dr. Thomas J. Ratchford

Rec'd [unclear]
Date 4/24/76
Time 8:15



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OLIN E. YEAQUE
CHAIRMAN

JOHN L. SWIGERT, JR.
EXECUTIVE DIRECTOR

COMMITTEE ON SCIENCE AND TECHNOLOGY
U.S. HOUSE OF REPRESENTATIVES

To: Oscar Stradinger
From: Tom Ratchford
Re: Attached correspondence

I will appreciate your assistance in preparing a response to the attached letter from Cong. Lehman for Chairman McCormack at your earliest convenience.

Thank you.

NOTE: PLEASE RETURN PASTED-UP NEWS ARTICLE
FOR OUR FILES.

NPI 76- 1918

WILLIAM LEHMAN
14TH DISTRICT, FLORIDA

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EDUCATION AND LABOR
POST OFFICE AND CIVIL SERVICE

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House of Representatives
Washington, D.C. 20515

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March 22, 1976

Honorable Mike McCormack
Chairman
Subcommittee on Energy Research,
Development and Demonstration
B374 Rayburn HOB

Dear Mike:

I am enclosing an article from the Miami Herald which was recently brought to my attention. It concerns leaks discovered in the fuel pits of the Florida Power and Light Company's Turkey Point power plant.

I would appreciate your directing your staff to take a look at this article and provide me with some information which could assist me in dealing with the fears and concerns my constituents have expressed.

Thank you for your assistance in this matter.

With best wishes, I am

Sincerely,

WILLIAM LEHMAN
Member of Congress

WL/mar
Enclosure

Arrow Points to General Area of Seepage as ... plans continued and expanded use of used fuel storage pits

Minor Leaks Discovered In FPL Nuclear Fuel Pits

By MIKE TONER
Herald Environment Writer

Highly radioactive spent nuclear fuel has been stored in leaking pits at the Turkey Point power plant near Miami for more than two years — with the full knowledge of both Florida Power and Light Co. and the U.S. Nuclear Regulatory Commission.

Some radioactivity already has escaped from the plant as a result of the leak. FPL officials say that the releases of radiation have been small and pose no threat to the public or to plant workers.

But the company admits that ra-

dioactive water has been leaking at irregular rates from both of the plant's spent fuel pits — heavily shielded structures of concrete and stainless steel designed for the temporary storage of "hot" used fuel after it is removed from the plant's two reactors.

ALTHOUGH THE water now is being collected and filtered to remove radioactive contamination, attempts to plug the leaks have been unsuccessful so far.

Repair efforts have been hampered by the intense radioactivity inside the pits, which makes it im-

possible for people to work inside them.

The pits are multi story, bunker-like structures adjoining the main reactor buildings at the power plant, located on the shores of Biscayne Bay 25 miles south of Miami.

Each year, a portion of the plant's fuel — no longer useful for producing electricity, but still at lethal radioactive levels — is unloaded from the reactors.

THE SPENT fuel, pellets of uranium and other radioactive materials encased in bundles of long, slender rods, then is placed inside the pits and flooded with water to help control the release of heat and radioactivity.

But the water itself also becomes radioactive — and it is that water which is now leaking from the fuel pits.

A company spokesman says the pits are "unbelievably secure and constructed to the same standards as the main reactor building.

But leaks first were detected the steel liners of one of the pits 1972 — before the nuclear plant went into service and before radioactive fuel was stored in pits.

The company didn't repair leaks then because it considered them to be "minor."

TODAY, THE rate of leakage is 90 gallons an hour — approximately 45 times what it was when it was first detected.

Leaks in the other pit were discovered in late 1975. The rate of leakage there has been slower at times only a seep — but radioactive water there has been not only the pit's steel liner, but a four-foot concrete wall.

Permanent repairs now may

Turn to Page 14A Col. 1



"The leaks are undesirable to get rid of them, a hazard. The pits are no collapse, and they are not

—FPL's A. D. Schmidt

FPL, U.S. Agency Aware

FROM PAGE 1

to wait until all of the fuel can be unloaded and the pits drained — something that may not be possible for several years.

In the meantime, FPL actually plans to expand the storage capacity of the leaking pits — even though it may not be able to repair the leaks themselves.

ORDINARILY, the used fuel would be stored in the pits for only a few months before being trucked away to one of the nation's three commercial reprocessing facilities.

"In terms of the imminent threat to the public, the risk of these leaks is rather small. But the long-term risks are much greater. These leaks are not just a potential problem, they are happening right now."

Robert Pollard,
Union of Concerned
Scientists

But the reprocessing plant at West Valley, N.Y., has been closed since 1972 for safety modifications and won't be reopened until at least 1979.

A second plant, near Morris, Ill., may never open at all. Its builders say the new \$64-million plant simply does not work.

The country's third reprocessing plant, at Barnwell, S.C., is embroiled in a licensing dispute and isn't expected to open until 1977 or 1978.

As a result, FPL — like most of the nation's other nuclear power plant operators — is being forced to store its spent fuel at the plant where it is used.

BUT THE storage pits at Turkey Point are nearing capacity, and the company is urgently seeking federal approval for a \$4-million program to triple the amount of fuel the leaking pits will hold. Without adequate storage, the plant could be forced to close.

Even with the expansion, however, the fuel already stored there will have to remain in place, and the company is uncertain it will be able to fix the leaks until it can be removed.

Company officials say they aren't worried about the continued leakage.

"The leaks are undesirable, and we would like to get rid of them, but they are no safety hazard," says A.D. Schmidt, FPL's vice president for power resources.

"The pits are not going to collapse, and they are not going to fall apart."

But because the rate of leakage appears to be increasing, Nuclear Regulatory Commission officials are more concerned about the problem.

"LEAKS DO not heal themselves," says Norman C. Moseley, director of inspection and enforcement for the NRC's Southeast region.

"Turkey Point has not yet received permission to store additional fuel at its plant, and it is possible that we might require them to repair the leaks before they get that approval," he said.

Repair efforts may be hampered by the storage of spent fuel, but the company could be required to unload the fuel to make any necessary repairs.



Pool-Like Area Inside Turkey Po

reactor where there is spare storage.

By themselves, the leaks do not yet pose any serious safety hazard.

BUT THEY DO exemplify a number of general problems in the nation's nuclear industry — including defects in plant construction, the failure to correct known defects, and a range of problems posed by the increasing storage of spent fuel at scattered locations around the country.

FPL, which has made a heavy commitment to construction of new nuclear power plants, is especially sensitive to the implications.

"Nuclear power is absolutely essential to the energy future of this country," said one company spokesman. "I certainly don't believe that this story is going to help the cause of nuclear power one bit."

There is agreement on that point from Robert D. Pollard, a former licensing project manager with the NRC, who resigned his post in January in protest over "unresolved safety problems" in nuclear plant construction.

"IN TERMS of the imminent threat to the public, the risk of these leaks is rather small," explained Pollard, who now works for the Union of Concerned Scientists, a group of Boston-based scientists critical of the nuclear industry.

"But the long-term risks are much greater," he added. "These leaks are not just a potential problem, they are happening right now."

The company is caught in the equivalent of a Catch 22. They didn't fix the leaks when they had the chance, and now that the leaks are apparently getting worse, they have so much spent fuel on hand that they can't fix them.

"If it weren't such a serious matter, it would border on the absurd."

The leaks, however, are not the only problems that FPL has been having with the storage of spent fuel.

BECAUSE THE fuel is hot, the water in the pits must be circulated to prevent the buildup of heat — and the possibility that the big pools of water could eventually begin boiling.

Each pit has only a single pump to circulate the water. One of them has failed twice in the last year. The other has failed three times.

"That is a high failure rate," says Moseley.

creased greatly — a process that takes hours.

But the reliability of the pumps will become increasingly important as FPL increases the amount of fuel it holds in the pits. More fuel will mean more heat.

"THAT WILL decrease the amount of time the company will have to deploy its emergency equipment," says Moseley. "If they triple the amount of fuel stored there, it will give them roughly one-third of the time they now have." As a precaution, FPL plans to install permanent back-up pumps on the fuel pits — a decision the company made shortly after a mishap with one of its temporary emergency pumps resulted in the spill of more than 7,000 gallons of radioactive water.

The sequence of events began on April 12, 1975. The pump on one of the spent fuel pits failed — for what was to be the first of three failures in the next five weeks. An emergency pump was moved in and hooked up, but it was left temporarily unattended and during that time, pulled a hose coupling on the pump loose.

BEFORE THE incident was noticed, the pump has spewed 7,400 gallons of radioactive water out on the floor of the building. The

FROM: Mike McCormack, Chairman Subcommittee on Energy Research, Development and Demonstration, House of Representatives		ACTION CONTROL TE file		CONTROL NO. 272
TO: Oscar Stradinger, ERDA		COMPL DEADLINE 4/27/76	DATE OF DOCUMENT Recd 4/26/76	
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Ltr fm Rep. William Lehman (Fla.) to Mike McCormack dtd 3/22/76 re leaks in the fuel pits of the Turkey Point plant		FINAL REPLY	<input type="checkbox"/> EXECUTIVE DIRECTOR	
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NRC FORM 232
(11-75)

EXECUTIVE DIRECTOR FOR OPERATIONS

PRINCIPAL CORRESPONDENCE CONTROL

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ACTION ITEM CONTROL FORM

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PRIORITY	FACILITY
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INITIAL ENTRY DATE
04-29-76

REQUESTED COMPLETION DATE
05-11-76

REQUESTOR
VOLGENAU-D

AUTHORIZED BY lm

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ACTION REQUESTED *Pls prepare reply - signature omitted - address Rep McCormack*

REMARKS/REFERENCES *Capt: Volgyman, Thompson, Ray, Howes*

Coordinate w/ Linda Underwood