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May 1, 1980

WILLIAM CAVANAUGH III
Vice President
Generation & Construction

1-050-02
2-050-02

Director of Nuclear Reactor Regulation
ATTN: Mr. R. W. Reid, Chief
Operating Reactors, Branch #4
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Subject: Arkansas Nuclear One - Units 1 & 2
Docket Nos. 50-313 and 50-368
License Nos. DPR-51 and NPF-6
Technical Specification Change
Request of October 31, 1979
(File: 1511.1, 2-1511.1)

Gentlemen:

Our letter of October 31, 1979, requested a change to the Technical Specification for Arkansas Nuclear One - Units 1 and 2 (ANO-1 and 2). This change concerned the method used to calculate the dispersion factor (x/Q) for radioactive gaseous emission.

The calculational method employed in our current Technical Specification requires us to use a x/Q based upon a two hour model of worst case accident conditions. As stated in our October 31 letter, we feel that these restrictive limits are unjustified and are therefore requesting that a Technical Specification change be issued immediately.

The need for immediate issuance of the Technical Specification change was amplified by the unnecessary negative publicity we recently received in a newspaper article in the Arkansas Gazette. The article concerned our radioactive gaseous emissions exceeding the Technical Specification reporting requirements, as was reported in Licensee Event Report No. 80-006/04L-0. As was stated in the article, Mr. K. V. Seyfrit of the Office of Inspection and Enforcement stated that the releases were a very small percentage of the maximum limits set by the NRC and were not considered a hazard to the public.

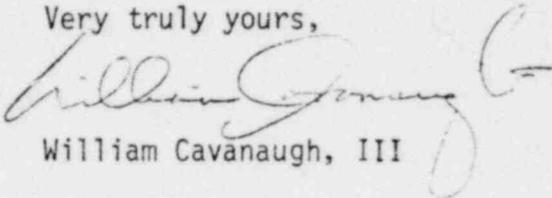
Mr. R. W. Reid

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Because of the statements made by Mr. Seyfrit and conversations we have had with members of your staff, we believe that the NRC staff has no real problem with the Technical Specification change we have requested. Considering the arguments stated above and the ample time your staff has had to review the proposed change, we cannot understand why the request has not been granted. We, therefore, request your immediate action on this matter.

Very truly yours,

A handwritten signature in cursive script, appearing to read "William Cavanaugh, III". The signature is written in dark ink and is positioned above the typed name. There is a small mark to the right of the signature, possibly a checkmark or a flourish.

William Cavanaugh, III

WC:MAS:skm

Attachment

Nuclear One Radioactive Emissions In 1st Quarter Require NRC Report

By CAROL MATLACK
Of the Gazette Staff

Radioactive gas emissions from Arkansas Nuclear One, Unit 1, were high enough during the first quarter of 1980 to require a special report to the Nuclear Regulatory Commission, although the Commission said the emissions were nowhere near levels that could endanger the public.

Arkansas Power and Light Company spokesmen said Wednesday that the amount of gas released was "insignificant" and said they were trying to get the NRC to relax some of its guidelines on radioactive gas emissions from the plant.

The NRC has a complex formula for calculating how much radioactive gas can be released from Nuclear One, but basically it comes down to this: The agency wants the level kept low enough that a person standing next to the plant for a year would be exposed to no more than 5 millirems of radioactivity, even under the worst weather conditions — that is, no wind to disperse the radioactive gas.

During the first quarter of 1980, the release rate from Unit 1 was high enough that a person standing next to the plant would be exposed to about 10 millirems a year, assuming the worst weather conditions.

Called Misleading

However, AP and L officials say the 10-millirem figure is misleading because it's based on the worst possible weather conditions, and not on actual conditions around the plant.

Karl Seyfrit, director of the NRC's regional office at Arlington, Tex., said that while the rate for Unit 1 was "higher than normal," it represented "only a very small percentage" of the maxi-

mum limits set by the agency, and was not considered a hazard to the public. (Unit 2, the newest reactor at Nuclear One, did not have enough emissions to require a report to the NRC.)

William Cavanaugh, AP and L vice president for generation and construction, said that most of the gas was released during a "purge" of the Unit 1 reactor containment building in January, when the plant shut down for modifications required by the NRC.

Defective Fuel

The radioactive gas level in the containment has been unusually high for the last several months because some fuel in the reactor core is defective and has been leaking. That causes an accumulation of radioactive gases, principally xenon and krypton. When the plant is shut down, the gases are "purged" before workers enter the building.

Cavanaugh said the problem was made worse because the NRC was requiring frequent shut-downs for modifications. The more often the plant shuts down, the more often the gases must be "purged," he said.

AP and L doesn't plan to re-

place the defective fuel in Unit 1 until next spring at the earliest, and possibly not until late 1982, he said.

Donald Rueter, manager of technical and environmental services for AP and L, said the company had asked the NRC to amend its formula for calculating radioactive releases from Nuclear One because the formula was "not realistic."

Exposure Overestimated

He said the formula overestimated the exposure that a person near the plant would receive, because it assumed the worst possible weather conditions, rather than typical weather conditions. Rueter estimated that the actual exposure level was only one-fifth to one-seventh the level estimated by the NRC.

Most other nuclear plants have been allowed to base their release rates on "average" weather conditions, Rueter said, but AP and L has been held to a more stringent standard. Company officials have asked to use the same standard as the other plants, he said, and "we understand that the NRC is going to have no problem in making this change."