

UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

Yellow

JUL 16 1973

Russell Z. Baron, Esq.
Brannon, Tickin, Baron & Mancini
930 Keith Building
Cleveland, Ohio 44115

In the Matter of The Toledo Edison Company
and The Cleveland Electric Illuminating Company
(Davis-Besse Nuclear Power Station)
Docket No. 50-346

Dear Mr. Baron:

In response to your informal request for information of June 28, 1973, I furnished Mrs. Stebbins the following information in a telephone conversation on July 5, 1973.

Issue 1

We are not aware of any studies that the Atomic Energy Commission (AEC) has done, or contracted for, regarding the conservation of energy.

We feel that your question regarding the "entire nuclear fuel cycle" is outside of the scope of any issue in the proceeding.

Issue 3

The regulatory staff has provided pertinent documents on the subject of transportation accidents involving radioactive materials.

We consider the questions regarding procedures to prevent hijacking or sabotage to have been withdrawn for the same reason that a similar interrogatory to the applicant was withdrawn; however, a pertinent Department of Transportation report was provided on the subject.

Issue 4

I am enclosing a document (labeled "Issue 4") which deals with the

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operational experience with zircaloy clad fuel in pressurized water reactors. I had previously sent a copy of this document to Mrs. Stebbins.

I have previously either sent documents, or indicated where they were available, which deal with the subject of radioactive releases, radioactive monitoring, and radioactive contamination. The AEC has not done any monitoring within a 10 mile radius of the site.

The AEC has never granted variances for nuclear power generating stations to allow radioactive releases from them in excess of limits. Technical Specifications (Tech Specs) are set on each plant which prescribe a maximum release rate. These Tech Specs are always below the limits contained in 10 CFR Part 20.

In the case of the plant specified, Vermont Yankee, the Tech Spec limits prior to Jan. 1, 1973, was .22 ci/sec. Pursuant to the request of the applicant, the limit was increased to .44 ci/sec for the period Jan. 1 - 15, 1973, after which time it was returned to .22 ci/sec. No variance was granted to exceed either of these Tech Spec limits; however, on January 16, 1972, at about 12:52 p.m. the release rate exceeded the .22 ci/sec limit for about 12 minutes. The noble gas release rate at the stack reached a peak of 2.65 ci/sec. At about 3:50 p.m. on Jan. 17, 1973, the Tech Spec limit was exceeded for approximately 26 minutes. A peak release rate of .416 ci/sec was reached during that period. The average release rate for the month of January, 1973, was .0313 ci/sec. The source of this information was operator reports as verified by the AEC.

Issue 5

I am enclosing a collection of tables (labeled "Issue 5 #1") predicting the radioactive effluents, broken down into isotopes, that might be discharged into Lakes Michigan, Superior, Huron and Erie from nuclear power plants. A copy of this document was previously sent Mrs. Stebbins. Similar information for any plants not included in this collection may be derived by the use of TID-3324-R1, the use of which was explained in my July 3, 1973, letter to you.

In response to your question about the anticipated radioactive releases from future nuclear power plants, the predicted releases from pressurized water reactors with zircaloy clad fuels are at or below 350 ci/yr of tritium and at or below 5 ci/yr of other isotopes. Boiling water reactor predicted releases are at or below 20 ci/yr of tritium and at or below 5 ci/yr of other isotopes. The anticipated releases of radioactive materials resulting from dismantling of any nuclear power plant will not be known until the AEC receives and approves dismantling plans from the licensee. This process has not yet been completed for the Fermi I plant.

I told Mrs. Stebbins over the phone that the effective half-life for radioactive isotopes in the Western Basin of Lake Erie is 1.8 years. This is not quite correct. The 1.8-year figure is for Lake Erie as a whole. We did not yet have adequate information available to estimate the effective half-life for the Western Basin of Lake Erie

The EPA report cited in my July 3, 1973, letter to you should be referred to in order to obtain information responsive to your questions regarding build-up of radioactivity.

We are aware of no studies of the currents in the Western Basin of Lake Erie done by the AEC.

We consider question "8" under Issue 5 to be irrelevant to the issues in the proceeding.

Issue 6

We have previously either furnished the Coalition documents, or indicated where they were available, which contain information responsive to your questions under Issue 6.

Issue 7

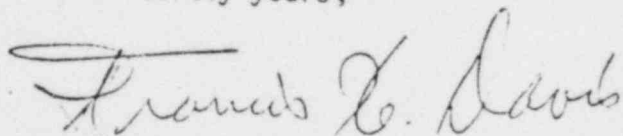
The regulatory staff has no information responsive to your question under Issue 7.

Issue 8

The Coalition has already been furnished the Final Environmental Statement and a document entitled "WASH-1249; Toxicity of Power Plant Chemicals to Aquatic Life" in response to your first two questions under Issue 8.

In response to your third question, we know of no such studies not reported in the EPA reports or referenced in TID-3324-R1, both of which were cited in my July 3, 1973 letter to you.

Sincerely yours,



Francis X. Davis
Counsel for the AEC Regulatory Staff

cc: See page 4

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cc w/document

John B. Farmakides, Esq.
Dr. Cadet H. Hand, Jr.
Mr. Frederick J. Shon
Joseph F. Tubridy, Esq.
Dr. Harry Foreman
Mrs. Evelyn Stebbins
Gerald Charnoff, Esq.

cc w/o document

Atomic Safety and Licensing
Appeal Board
Atomic Safety and Licensing
Board Panel
Mr. Frank W, Karas

Enclosures:

- (1) Table listing operational experience with zircaloy clad fuel in PWR's.
- (2) Tables predicting radioactive effluents.

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