

August 22, 1973

UNITED STATES OF AMERICA
ATOMIC ENERGY COMMISSION

Before the Atomic Safety and Licensing Board



In the Matter of

THE TOLEDO EDISON COMPANY and
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

(Davis-Besse Nuclear Power Station)

Docket No. 50-346

INTERVENORS' PROPOSED FINDINGS OF FACT
AND CONCLUSIONS OF LAW

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ISSUE 1:

"The Coalition contends that the Final Environmental Statement constitutes an arbitrary and capricious refusal to comply with consideration of alternatives as required by Section 102(2)(c) iii of the National Environmental Policy Act of 1969, in that the 'staff' has failed and refused to consider the alternative of conservation of energy within the Applicant's service areas so as to obviate the need for the 872 MW additional capacity of the Davis-Besse Plant."

1. The Applicants, Toledo Edison Company and Cleveland Electric Illuminating Company, have spent \$11,464,858 and \$20,408,047 respectively, or \$31.9 million combined, on advertising, sales promotion and public relations in the past five years according to

Toledo Edison Company Summary of Advertising, Sales Promotion and Public Relations Expenses (Intervenors' Exhibit 5)

Cleveland Electric Illuminating Company Summary of Advertising, Sales Promotion and Public Relations Expenses (Intervenors' Exhibit 6)

2. Information on Applicants' advertising and sales promotion policies, purposes, expenditures and results thereof are provided in the following Intervenors' Exhibits:

Letter from William R. King, Public Relations, Cleveland Electric Illuminating Company to Mrs. Stebbins, dated November 8, 1971, and attachments thereto - (Intervenors' Exhibit 16-A)

Cleveland Electric Illuminating Company Budget Planning Report for the Year 1971, Public Information Department, dated October 9, 1970 - (Intervenors' Exhibit 16B)

Affidavit of Evelyn Stebbins, dated 26 July, 1973 (Intervenors' Exhibit 16-C)

Cleveland Electric Illuminating Company President's Letter to the Editor, Cleveland Plain Dealer, November 14, 1971 (Intervenors' Exhibit 16-JJ)

These exhibits show that Cleveland Electric Illuminating Company is actively promoting use of electricity, and are advertising to promote peak power use, including air-conditioning. They are encouraging builders to go "all electric in future developments". The "On Location" program was even broadcast into more than 170 area schools via the Cleveland Board of Education, which is free advertising for them.

3. The public is being told through the extensive advertising programs of the Applicants

"You'll benefit these eight ways when you buy or build a total-electric home with flameless electric heating" (Intervenors' Exhibit 16-D)

"Try Telling Today's Woman to Use Less Electricity"

"...some people question the need for more electricity. Use less electricity, they say and you'll solve our environmental problems. They are wrong." (Intervenors' Exhibit 16-E)

"Look at all you can buy for a buck" (Intervenors' Exhibit 16-F)

"This unique method of generating electricity conserves our natural resources and helps protect our environment" (Intervenors' Exhibit 16-G)

"Come 1975 --- more power to you" (Intervenors' Exhibit 16-H)

"Electric Heat: We've tried it in 2 homes for 25 years. We like it" (Intervenors' Exhibit 16-I)

4. The public is encouraged to use electricity, electric heat, electric ranges, electric dryers, electric lights and have total electric homes through advertising programs, brochures, and sales departments, as evidenced by the following Intervenor's Exhibits -

To Karen and Don there's no place like a mobile home. Especially with electric heat. Illuminating Company Ad. (Intervenor's Exhibit 16-J)

Mrs. Barnes is a draft dodger. That's why she moved to an apartment with flameless electric heating. Illuminating Company Ad. (Intervenor's Exhibit 16-K)

The Megleys discovered electric heat. (And then they discovered it costs less to operate than they expected it would.) Illuminating Company Ad. (Intervenor's Exhibit 16-L)

Her flameless electric dryer gives her more time for the variety in her life. Illuminating Company Ad. (Intervenor's Exhibit 16-M)

And she's going to miss her electric range in India! Illuminating Company Ad. (Intervenor's Exhibit 16-N)

Her Electric range is a time saver she wouldn't want to live without. Illuminating Company Ad. (Intervenor's Exhibit 16-O)

The environment is a cool glen and a babbling brook. It is also an air-conditioned room and clean tap water. Illuminating Company Ad. (Intervenor's Exhibit 16-P)

Try telling today's woman she doesn't need electricity. Illuminating Company Ad. (Intervenor's Exhibit 16-Q)

How can you tell a kid not to grow? Illuminating Company Ad. (Intervenor's Exhibit 16-R)

Your next ten years will "go like 90". Illuminating Company Ad. (Intervenor's Exhibit 16-S)

When it comes to pollution, Samuel Puldom doesn't pull any punches! Illuminating Company Ad. (Intervenor's Exhibit 16-T).

Whose job takes six times as much electricity as his home? Illuminating Company Ad. (Intervenor's Exhibit 16-U)

True or false: As production of electricity increases, our air gets cleaner. True. Illuminating Company Ad. (Intervenor's Exhibit 16-V)

Will you be caught in the middle? Illuminating Company ad. (Intervenor's Exhibit 16-W)

List of Radio Stations broadcasting "On Location" program of Cleveland Electric Illuminating Company. (Intervenor's Exhibit 16-X)

Illuminating Company Broadcast Schedule for radio program "On Location", for advertising in 1973. (Intervenor's Exhibit 16-Y)

Illuminating Company, Ohio Edison and Ohio Power schedule of advertising for 11 O'Clock News Show, W&S-TV for 1973. (Intervenor's Exhibit 16-Z)

Illuminating Company, Ohio Edison Co., Broadcast Schedule of Advertising, "Academic Challenge", WETS-TV, for 1973. (Intervenors' Exhibit 16-AA)

Toledo Edison Company Newspaper District Advertising Scheduled for 1973 (Intervenors' Exhibit 16-BB)

Toledo Edison, WSPD-TV Schedule for Advertising, 6 P.M. Weather Show, for 1973 (Intervenors' Exhibit 16-CC)

Toledo Edison, WDHO-TV Schedule for Advertising, 11 P.M. News Show, for 1973. (Intervenors' Exhibit 16-DD)

Toledo Edison WTVL-TV Schedule for Advertising, 11 P.M. News Show, for 1973. (Intervenors' Exhibit 16-EE)

Toledo Edison, Radio Schedule for Advertising, 1973 (Intervenors' Exhibit 16-FF)

Toledo Edison, Radio Schedule for Advertising, Outlying District Radio Stations, for 1973 (Intervenors' Exhibit 16-GG)

Illuminating Company - Area Light Flyer. (Intervenors' Exhibit 16-HH)

Questions and Answers about Light Gardening from Cleveland Electric Illuminating Company. (Intervenors' Exhibit 16-II)

Cleveland Electric Illuminating Company President's Letter to the Editor, Cleveland Plain Dealer, Nov. 14, 1971. (Intervenors' Exhibit 16-JJ)

CEI Spend Millions on Ads and Promotion, U.S. Report Shows, Article from the Plain Dealer, October 28, 1971. (Intervenors' Exhibit 16-KK)

Atoms for Energy - flyer from the Illuminating Company. (Intervenors' Exhibit 16-LL)

Toledo Edison Responses to Intervenors' Interrogatories on Nuclear Slide Program (Intervenors' Exhibit 16-MM)

Cleveland Electric Illuminating Company Responses to Intervenors' Interrogatories on Nuclear Slide Program (Intervenors' Exhibit 16-NN)

These various advertising programs are influencing the public to use electricity, to purchase appliances which use electricity, telling them how much it does for them and how little it costs, but not to conserve electricity. Advertising for all-electric homes, while having a winter peak, also ads to summer peak, as they are air conditioned.

4. The Applicants are very actively soliciting business and industry to bring them into their service areas. Toledo Edison has had an annual budget for area development from 1966 to 1973 of from \$70,874 to \$89,095, and they have made from 380 to 990 calls a year according to

Applicants' Responses to Intervenors Interrogatories (Intervenors' Exhibit 16-OO)

Publications are prepared and distributed by Toledo Edison, such as -

Toledo Edison Site Service (Intervenors' Exhibit 1)

Community Profile (Intervenors' Exhibit 2)

The Location With the Winning Combination - Northwestern Ohio
(Intervenors' Exhibit 3)

Northwestern Ohio/Land of Good Living (Intervenors' Exhibit 4)

Cleveland Electric Illuminating Area Development Department has had an annual budget of from \$396,241 to \$498,822 for the years 1968 through 1972, making 9, 170 calls for 1972 which was a typical year. (Intervenors' Exhibit 16-00)

The President of Cleveland Electric Illuminating Co. has stated: "We advertise the advantages of Cleveland-Northeast Ohio in national publications to attract new industry and commerce here." (Intervenors' Exhibit 16-JJ)

Mr. Bridges, Manager of Public Information Department of Cleveland Electric Illuminating Company has stated: "We must Stimulate the Growth of the Cleveland-Northeast Ohio Area We Serve." (Intervenors' Exhibit 16-A)

The Cleveland Electric Company Area Development Department attempts to bring industry to this area through advertising in national publications, such as

Ad from TIME, November 1, 1971 - Present/our liquid assets (Intervenors Exhibit 16-PP)

and actively strives to bring industry to this area as outlined in Intervenors Exhibits 16-A and 16-B, and prepared publications such as

Cleveland and the Power of an Idea
Patterns of Growth
Industrial Park Folder featuring Lakeland Freeway Industrial Site
Industrial Location Opportunities in Brecksville

5. In addition to the Area Development Department, Cleveland Electric Illuminating Company has other department in their Marketing Group --

Residential Sales Department	Commercial Sales Department
Industrial Sales Department	Eastern Sales Department
Marketing Service Department	

which according to Intervenors Exhibit 16-A, provide such services, in part, as -

data on heating and cooling equipment
tour of all electric buildings
light meter surveys
tours to Nela Park so that they (customers) may benefit from the newest advances in lighting and other electrical uses

6. Cleveland Electric Illuminating Company works with the Greater Cleveland Growth Association (Intervenors' Exhibit 16-B) and donates money to the Greater Cleveland Growth Association according to -

Federal Power Commission Report, page 304, 1970	(Intervenors' Exhibit 16-QQ)
" " " " " "	1971 (Intervenors' Exhibit 16-RR)
" " " " " "	1972 (Intervenors' Exhibit 16-SS)

7. It is apparent from advertising schedules that the Applicants have spent very, very little money on conservation of energy, in relation to their \$31.9 million expenditure for sales promotion and advertising. Further Applicants could provide Intervenors with no budget figures for "conservation of energy", (Intervenors Exhibits 5 and 6) which indicates that they have given no priority to such a program.

8. From testimony of Richard E. Morgan, (Tr-327-3), "The full capacity of Davis-Besse would not be needed until the summer of 1977, assuming that CAPCO demand projections are correct and that no energy conservation efforts are undertaken.

9. There is, however, no assurance that projections are correct, inasmuch as from the Final Environmental Statement, page 8-7, "A comparison of the Applicant's load projections vs. actual historic load demand is available to the Staff for the time period of 1960 to 1970. This load projection for the ten year period was made in mid 1960 and was intended to anticipate the load growth up to 1970. Throughout this time period (1960 - 1970) the projections were from 13.9% to 8.3% above the actual experienced demand."

10. From testimony of Richard E. Morgan, Tr-327-6), "The projections for future demand by CEI and TEC are little more than an extrapolation of past demand." "... the Applicants are expecting the growth in peak demands to continue at approximately the same rate as in the past."

11. From testimony of Richard E. Morgan, Tr-327-8, "The five CAPCO companies have always structured rate schedules so as to elicit the greatest possible demand growth from their customers. This promotional pricing involves charging low rates to large users, such as industries with relatively elastic demands for power, while charging high rates to small users with relatively inelastic demands. While some price discrimination is justified based on cost of service, there is substantial room for equalization of rates in the CAPCO companies. Examples of promotional rates include special rates for space conditioning from CEI and Ohio Edison, and special all-electric rates from CEI and TEC. Since these rates are not aimed specifically at off-peak use, they can be assumed to have some effect on the peak demands of these companies. Thus, if the CAPCO companies were to make efforts toward equalizing their rate structures, some reduction in the 1977 CAPCO peak could be expected."

12. From testimony of Richard E. Morgan, Tr-327-7, "One factor which will certainly have a downward effect on future peak demands in the CAPCO region is changes in the rates charged by the CAPCO companies. Some significant changes have already taken place and more are expected in the near future. For example, Toledo Edison has recently received a large rate increase, and CEI has a large rate increase pending before the Public Utilities Commission of Ohio (PUCO) at this time. Large increases in the price of electricity will certainly have a dampening effect on future power demands in the CAPCO region. The magnitude of this effect is unknown and should be studied. In a study conducted in California, the Rand Corporation predicted that expected increases in the price of electricity between 1970 and 1975 would reduce 1975 demand by about 4% below utility projections."

13. From testimony of Richard E. Morgan, Tr-327-5 and 327-6, "The magnitude of the reduction in peak demands necessary in order to obviate the need for Davis-Besse plant is not very large. In order to achieve a 20% reserve margin in 1975 without Davis-Besse, CAPCO needs a reduction in peak demand of only 2%. Assuming a 16% reserve margin in 1975, there need be no demand reduction at all."

14. According to testimony of Dennis J. Nightingale, Tr 683-5, Consolidated Edison Co. of New York started the "Save a Watt" conservation program in 1971, and "Con Ed estimated that this program which became effective in 1971, resulted in a 350-400 mw (4 to 5 percent) reduction in the 1972 summer peak load of 7272 MW."

15. The Board find that the Applicants through their multi-million dollar sales promotion and advertising programs are encouraging the use of electricity; that the Applicants have not adopted a conservation of energy program; that the alternative of conservation of energy could reduce the demand for electricity significantly; and that the lack of consideration of conservation of energy is contrary to the provisions of the National Environmental Policy Act.

ISSUE 9:

"The Intervenor contends that the Final Environmental Statement is inadequate in that the methods used to relate proposed releases of radioactive material to contamination and radiation levels in the environment may greatly underestimate those final levels."

1. Strontium-90 levels in milk samples have been shown to be higher near nuclear power plants, such as

(a) Shippingport

as documented by Dr. Sternglass testimony orally and Intervenor's Exhibits 10-A and 10-B; and NUS Corporation Reports, NUS-884, NUS-916, NUS-915, NUS-950, Pre-Operational Environmental Radioactivity Monitoring Program at the Beaver Valley Power Station, Intervenor's Exhibits 19, 19-A, 19-B, 19-C.

Where Strontium-90 levels went up and down with power generation (Tr-792)

and that high Strontium-90 levels in milk disappeared after repairs (Tr-791)

(b) Plumbrook

as documented by Dr. Sternglass testimony orally and Intervenor's Exhibits 10-A and 10-B

and as documented by Report of Reactor Operations for the NASA Plum Brook Reactor, April 9, 1971 - May 19, 1972, Intervenor's Exhibit 20, showing Strontium-90 in milk to be abnormally high when related to Cleveland (Dr. Sternglass testimony, Tr-803)

(c) Brookhaven, Indian Point and Scriba

as documented by Dr. Sternglass testimony, Tr-804 and Tr-832, and Intervenor's Exhibit 17, New York State Department of Environmental Conservation, Environmental Radiation Bulletin Number 4, 1972.

2. Radioactivity in Lake Erie surfact water shows a general, although not perfect pattern of higher activity at Sandusky and near Sandusky

- (a) as documented by Dr. Sternglass testimony oral and Exhibits 10-A and 10-B,
- (b) Intervenor's Exhibit 15, Radioactivity in Surface Water with distance from Plumbrook Reactor, 1964, 1965, and 1966, as prepared by Dr. Sternglass
- (c) Intervenor's Exhibit 24 through 24-GG, Radiological Monitoring Data of the Ohio Department of Health for years 1962 through 1969
- (d) Applicants' Exhibit 15-A, Annual Average Total Activity in Untreated Lake Water, Year 1963, is incorrect in that it should show that Port Clinton is the highest with 100 pCi/l. If chart showed actual figures it would read -

Toledo - 90; Port Clinton - 100; Sandusky - 74; Huron - 50; Lorain - 74;
Cleveland - 32

- (e) Applicants' Exhibit 15-B, Annual Average Total Activity in Untreated Lake Water, Year 1967, because of scale, does not readily show actual increase, although slight at Sandusky and Port Clinton over other areas of the Lake. Actual figures -

Toledo - 6; Port Clinton - 8; Sandusky - 8; Huron - 5; Lorain - 3; Cleveland - 4

- (f) Similarly, obtaining Annual Averages of Radioactivity Levels for Lake Erie from Ohio Department of Health Reports on the Radiological analysis of Ground and Surface Waters in Ohio for the year 1962, Intervenor's Exhibits 24-B through 24-O, averages would show -

Toledo - 90; Port Clinton - 113; Sandusky - 184; Huron - 70 and Lorain - 56,

(no data for Cleveland that year)

3. The thermoluminescent dosimeters (TLD's) for Sandusky showed a higher reading for the last quarter of 1972 than for the first quarter of 1973 when the Plumbrook Reactor was shut down, as documented in

- (a) Dr. Sternglass oral testimony and Intervenor's Exhibits 10-A and 10-B
 (b) Applicants Exhibit 5-A, Pre-Operational Environmental Radiological Monitoring Program, July through December 1972 and Applicants' Exhibit 5-B, Pre-Operational Environmental Radiological Monitoring Program, January, February, March, 1973

Applicants have attempted to show that this reading is not meaningful; they have not proved their point inasmuch as -

- (c) Industrial Bio-Test Laboratories have not indicated that quarterly dosimeters were shipped with October dosimeters, only Mr. Crouse's testimony (Tr-872) which is not supported by any facts.
 (d) Dr. Frigerio, Tr-967, starting on line 4 has stated "And we inferred --- and it was an inference --- the dosimeters for the last quarter had probably been in the same flight -- this is an inference."
 (e) If the TLD's for October were shipped with the last quarter TLD's, and if this procedure is used to ship other monthly TLD's, it would allow monthly TLD's to fade before they are read.
 (f) Since there is no October, 1972, TLD reading to verify quarterly readings, it is possible that there could have been a high October reading which might account for the high quarterly reading.
 (g) Dr. Frigerio has stated, Tr-968, line 11, "The most obvious answer, certainly the one that appeals to me most having dealt with TLD's is simply that all of these TLD's during the last quarter were in some irradiated and irradiated as a group together; not within their respective stations." This hypothesis is not particularly supported by BIO-TEST data, Ap. Exhibit 5-A, Table 17, page 47, which shows that some of the 4th quarter stations have exposure (mrem) approximately the same as the previous quarter, and others have lower exposures.

4. High levels of radioactivity in soil, milk, and high TLD readings for Shippingport Reactor area have been shown by

- (a) Intervenor's Exhibits 19, 19-A, 19-B, and 19-C, Pre-Operational Environmental Radioactivity Monitoring Program at the Beaver Valley Power Station prepared by NUS Corporation
 (b) Intervenor's Exhibits 10-A and 10-B, Testimony prepared by Dr. Sternglass
 (c) Intervenor's Exhibits 11-A through 11-B, Graphs prepared by Dr. Sternglass regarding Shippingport area, from data in NUS Environmental Report

showing external dose rates for sampling stations near Shippingport.

- (d) Intervenor's Exhibit 21, Pennsylvania Department of Environmental Resources Water Quality Network Radioactivity Results August 1964 through August 1972
- (e) Some Observations on the Reports of Excessive Radionuclides in the Shippingport Area, by Irving Michelson, Director, Environmental Health & Safety Research Associates, Intervenor's Exhibit 22
- (f) Intervenor's Exhibit 23, Statement by Prof. Harold L. Rosenthal, Professor of Physiological Chemistry, Washington University

While attempts have been made to show that data of the NUS Corporation reported in Intervenor's Exhibits 19, 19-A, 19-B, 19-C, is not accurate and too high, testimony of Dr. Goldman of NUS Corporation and Applicants' Exhibit 13, Assessment of Environmental Radioactivity in the Vicinity of Shippingport Atomic Power Station, July 20, 1973, high reported radioactivity levels have not been adequately explained, as

- (g) Transient exposure can possibly explain some changes in TLD readings, however Exhibit 13, page 12, second line from bottom "The only major exceptions would be for the periods covering 4/01/71 through 5/11/71 and 5/11/71 through 6/03/71", and a supposition is made that "These differences could be due to handling errors...."
- (h) Applicants' Exhibit 13, page 13, states "An effort to make definite conclusions from the reported NUS data at this late date is impossible"
- (i) Applicants' Exhibit 13, page 9, states "A suitable explanation cannot be made of the higher than average ^{90}Sr levels reported in 1971."

Reliability of Applicants' Exhibit 13, must be questioned^{a/} as

- (j) Retesting was on a selective basis --- Only some of the samples could be found for retesting, samples which could not be found in January, were found in June in a storage area, according to testimony of Dr. Goldman, Tr-925 - 926.
- (k) Milk samples tested were for 1973, not the period in question in 1971 according to Applicants' Exhibit 13, pages 1 and 2
- (l) Wind data from 1971 was not available but was estimated, and other assumptions were used, Applicants' Exhibit 13, pages 3 and 4, to calculate hypothetical ^{131}I release rates.
- (m) The 1971 total inventory of ^{131}I in the primary coolant was calculated, using data for 1973, not 1971 data, Applicants' Exhibit 13, page 4.
- (n) Applicants Exhibit 13, page 14, shows that estimates of failed fuel for 1971 were made by using February 1973 report to the Division of Naval Reactors, NT-73-2. Again data from 1973 is used to estimate what might have been in 1971.
- (o) Dr. Goldman Testimony, Tr-939, line 75 with respect to TLD's that "They were reanalyzed mathematically rather than in a laboratory sense, certainly cannot be an accurate re-evaluation of what might have been, but is subject to error."

Transient exposure to TLD's does not explain all high readings as

- (p) Downwind dosimeters showed higher readings than upwind dosimeters according to Intervenor's Exhibit 11-A and 11-B
- (q) Applicants' Exhibit 13, page 12, states "This transient exposure, shown in column 4,

Appendix VI, would be approximately the same for all dosimeters in that batch cover up a given exposure period."

5. Correlation studies, prepared by Dr. Sternglass, between Control Dosimeter No. 1 and other dosimeters in the vicinity of Shippingport, as listed in intervenors' Exhibits 19, 19-A, 19-B, 19-C, (Pre-Operational Environmental Radioactivity Monitoring Reports prepared by NUS Corporation) show that Control Dosimeter No. 1, supposedly kept in Pittsburgh, had an extremely high correlation with dosimeter No. 38, which is on the site of the Shippingport Reactor.

- (a) Dr. Sternglass concludes "That either inadvertently or advertently the control dosimeter that was supposed to be kept 25 miles away was in fact kept near the site, in fact, near Dosimeter 38." (Tr-985, line 22)

If this is so, it would explain and rebut Applicants' Exhibit 13, pages 12 (b) and 13 (c)

- (b) "Values reported for the control dosimeter (a dosimeter annealed and readout concurrently with the field dosimeters but held in a Pittsburgh office) showed readings ranging from 12 to 40 UR/hr for the periods in question. Our results obtained by placing three dosimeters in the same location as the control dosimeter show an average reading of approximately 7 UR/hr. The difference between these values is most likely due to the exposure received by the NUS dosimeters during transportation to and from New Mexico.
- (c) "The NUS, TLD program, with no means of correcting for transient exposures, is inadequate for accurately determining low levels of radiation exposure. An effort to make definite conclusions from the reported NUS data at this late date is impossible, however, we feel the data as it was reported by NUS does not represent the actual exposure for the periods in question. The values reported for the control dosimeter alone would lead one to this conclusion."

6. The Board finds on evaluating all the evidence presented on Issue 9, that serious questions remain regarding large releases of radioactivity from the Plum Brook and the Shippingport reactors and that there has been radioactive contamination of the air, soil, milk, and water in excess of estimates; that the Davis-Besse facility is scheduled to release many times more radioactivity than was released by the Shippingport and Plum Brook reactors; and that the dose levels from the Davis-Besse facility have not been properly evaluated.

FINDINGS OF FACT

1. The Atomic Energy Commission has failed to properly discharge its legal responsibility to implement the National Policy Act of 1969, "to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man"; and to carry out the policy as set forth in NEPA to "assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings"; and has further failed to prepare a proper Environmental Statement, as required by NEPA, which has fully and completely assessed

- (i) the environmental impact of the proposed action
- (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented
- (iii) alternatives to the proposed action

inasmuch as the Final Environmental Statement has not considered

- (a) increased cancer, heart disease, and other health effects from operation of the Davis-Besse Plant
- (b) cumulative and synergistic accumulation of pollutants from the Davis-Besse Plant, along with effluents from all other nuclear plants on Lakes Michigan, Huron and Superior
- (c) The total effect of all effluents to Lake Erie as a result of all operations of the Davis-Besse Plant, either alone or in combination with other pollutants
- (d) the alternative of conservation of energy
- (e) all possible storm damage and environmental consequences of such incidents.

2. The Atomic Energy Commission Hearing Board has erroneously, and in violation of the National Environmental Policy Act, not allowed biological consequences of operation of the Davis-Besse Reactor to be discussed at this Hearing, inasmuch as

- (a) This Hearing was the full environmental hearing on the Davis-Besse Plant as required by NEPA, whereas hearings held last summer were not full environmental hearings

- (b) The National Environmental Policy Act specifically states as one of its purposes "to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man".
- (c) The state of the art of measuring radioactive releases is not capable of detecting all radionuclide concentrations. There are minimum detectable levels under which measurements cannot be made as indicated in Intervenor's Exhibit 19, Pre-Operational Environmental Radioactivity Monitoring Program at the Beaver Valley Power Station, and the health effects in humans is a biological measuring device which can record effects of radiation, perhaps more accurately than our present measuring devices.
- (d) There have been increases of cancer and other serious health effects near presently operating nuclear reactors such as Shippingport and Plum Brook, according to data gathered by Dr. Sternglass, and these serious health effects have occurred at a much lower level of radioactive releases than the projected releases from the Davis-Besse Plant (Tr 808 and Intervenor's Exhibits 10-A and 10-B, as submitted).

CONCLUSIONS

1. In accordance with Appendix D to 10 CFR Part 50 of the Commission's regulations, the Board concludes:
 - a. The environmental review conducted by the Commission's Regulatory Staff pursuant to Appendix D of 10 CFR Part 50 has not been adequate;
 - b. The requirements of Section 102(2)(C) and (D) of NEPA and Appendix D of 10 CFR Part 50 have not been complied with in this proceeding;
 - c. Having considered and decided all matters in controversy among the parties and having independently considered the final basis among conflicting factors contained in the record of the proceeding with a view to determining the appropriate action to be taken, the Board has determined that the Construction Permit should be terminated until the National Environmental Policy Act is complied with.

ORDER

1. Based on the Board's findings and conclusions and pursuant to the Atomic Energy Act and the Commission's regulations, IT IS ORDERED that the Director of Regulation is authorized to terminate the Construction Permit, consistent with the terms of this Initial Decision. IT IS FURTHER ORDERED, in accordance with 10 CFR[§] § 2.760, 2.762, 2.764, 2.785 and 2.786, that this Initial Decision shall constitute the final decision of the Commission subject to the review thereof pursuant to the above-cited rules.

UNITED STATES OF AMERICA
ATOMIC ENERGY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of

THE TOLEDO EDISON COMPANY and
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

(Davis-Besse Nuclear Power Station)

Docket 50-346

CERTIFICATE OF SERVICE

I hereby certify that copies of "Intervenors Proposed Findings of Fact and Conclusion of Law" were served on this 22nd day of August, 1973, as follows:

By delivery to Cleveland Electric Illuminating Company Office of Mr. Donald Hauser:

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Chief, Public Proceedings Branch
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