

UNITED STATES OF AMERICA  
ATOMIC ENERGY COMMISSION



In the Matter of )

THE TOLEDO EDISON COMPANY and )  
THE CLEVELAND ELECTRIC ILLUMINATING )  
COMPANY )

Docket No. 50-346

Davis-Besse Nuclear Power Station )

LIFE'S REPLY BRIEF--CHALLENGE TO  
10 CFR PART 20

PRELIMINARY STATEMENT

Pursuant to the post-Hearing schedule ordered on February 11, 1971 (Tr. pp. 2137) and confirmed on February 18, 1971 any answer to LIFE's brief regarding the validity of 10 CFR Part 20 was to be served on or before March 8, 1971. The AEC Staff's brief was not in fact served until March 9, 1971. Pursuant to the schedule calling for LIFE's reply if any, within 10 days thereafter, LIFE is filing this reply brief on or before March 19, 1971. This adjustment was confirmed orally by Chairman Skallerup contacted individually by LIFE on March 15, 1971, because the full Atomic Safety and Licensing Board was not then in session.

In view of the fact that Counsel for Applicant on March 2, 1971 announced to the Board that they were not going to file a reply to LIFE's brief regarding Part 20 and that Applicants' proposed findings of fact and conclusions of law were going to include comments on LIFE's challenge, any reply which LIFE has to that document will be contained herein.

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This second LIFE brief replies to the content of the AEC brief and is intended to be read together with that earlier brief.

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In our earlier brief LIFE explains its contentions that Part 20 misconceives the proper function of safety standards in that it erroneously includes cost as a factor in setting such standards. Page six of the AEC's brief mentions this LIFE argument without giving an answer except to deny it. The AEC does not explain why the "economics of improvements" (referred to in 10 CFR 20.1 (c)) is relevant to safety. It is not pertinent to LIFE's contention to point out that the Commission follows the recommendations and guidance of various groups of scientific experts. Figuring cost into the determination of safety standards is an exercise of value judgement which the recommendations of scientific groups should not be making for the Commission. The fact that other groups may have recommended reference to cost and technical feasibility does not validate it or absolve the AEC of the responsibility to exercise its administrative discretion with reason and within the scope of its Congressional mandate.

Contrary to the implication of the AEC's comments, LIFE does not contend Part 20 is outmoded because it does not incorporate NCRP Report No. 39 (Applicant's Exhibit 8). However, the fact that even the National Council on Radiation Protection has recommended certain dose limits which are strikingly different from those in Part 20 highlights the inadequacies of the existing criteria. Further, th-



NCRP report is based on data that has been available for some time although the AEC has not reflected current scientific developments in Part 20. The NCRP's changes can hardly be dismissed as insignificant--reductions of 50% (occupational skin and thyroid doses), 40% (occupational forearm dose), 80% (occupational feet and ankle dose), 33 1/3% (for non-occupational dose to certain body organs). NCRP Report No. 39 also recommended creation of a new occupational category for fertile women who would be limited to 2 or 3 rems per year instead of the 5 rems they can now receive. The purpose of this change would be to ensure that a fetus is not exposed more than .5 rems during the entire gestation period. What all of this means is that existing Part 20--viewed by a group that helped formulate it--contains some exposure limits that should be lower.

It is nice that the FRC has begun a complete review of the current radiation standards with the help of the National Academy of Sciences and NCRP, but reference to this long overdue review does not answer the objection LIFE has raised to the construction of this plant under existing guidelines.

LIFE is obliged to point out the Applicants' and AEC's erroneous interpretation of Dr. Sternglass' testimony, concerning relationships between radiation exposure and infant mortality on pp. 29-30, 33-34 of Applicants' proposed findings of fact and conclusions of law in the form of an initial decision and on p. 10 of AEC's brief. Applicants mistakenly state on those aforementioned pages that Dr.

Sternglass "alleged a causal relationship between fallout deposition and infant mortality and a causal relationship between low level radioactivity releases from certain nuclear facilities and infant mortality in neighboring counties." On transcript pages 1356 on lines 8-11, Dr. Sternglass states his data suggests an association between low level radiation and increases in leukemia in Utah. Again on page 1356 lines 23-24 Dr. Sternglass states that his data on excess deaths and fallout deposition "could not be regarded as proof of causation," but suggests a correlation between the two. In every case of data cited (Tr. pp. 1359-1392) Dr. Sternglass explicitly pointed out that this is not definite proof of a causal relationship--but, merely an association between the data. And in answer to Applicants' question on cross-examination on this very matter (Tr. 1414-1415) Dr. Sternglass clearly stated "The kind of data I submitted and which exists in all this type of-- in these kinds of cases--can never be regarded as 100 percent proof of causation, but can only be regarded as a probability that the hypothesis is correct, that there may well be a causal relationship and all one can do is increase the probability of that hypothesis."

Tr. 1415

Applicants on page 37-38 of proposed findings of fact and conclusions of law and AEC Staff on page 10 of reply brief state that Dr. Tamplin does not show how the total population can be exposed to an average dose of 170 millirems per year. LIFE submits that this would be irrelevant to a challenge to Part 20, since Part 20 does in fact, permit exposure to an average dose of 170 millirems per year to the population. Dr. Tamplin has shown that the allowable exposure of an average dose of 170 millirems per year prescribed in Part 20 to be excessive.



The fact remains that the existing Part 20 criteria are inadequate and that Applicants' assurances that Davis-Besse will meet these criteria should not be regarded as proof of the ultimate safety of the proposed plant.

At the hearings, the AEC did not present convincing evidence to prove that Part 20 adequately deals with the problem of apportioning radioactive output among multiple existing and potential sources. Several nuclear facilities ring Lake Erie already. How many more will be permitted and at what level of emission can they operate? Neither 10 CFR 20.106 (e) nor any other section of Part 20 addresses itself to this increasingly important problem.

In conclusion, the AEC regulatory staff brief and Applicants' proposed findings of fact and conclusions of law in the form of an initial decision fail to give satisfactory answers to the points made by LIFE's evidence and summarized in our earlier brief. As we stated in that earlier brief, Part 20's flaws--the excessively high level of some of its exposure limits, the lack of a clear preventive regulation regarding reconcentration of radionuclides or exposure from multiple sources of radiation--are made much more serious because of the significance of their subject matter, which is the health and safety of every person in the country.

For all the reasons stated our briefs, LIFE submits that the Board should find that Part 20 is not within the Commission's authority and does not represent a reasonable exercise of discretion.

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The Board should, therefore, deny the Application for a construction permit for the Davis-Besse nuclear power station.

Respectfully submitted,

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