

July 16, 1970

UNITED STATES OF AMERICA  
ATOMIC ENERGY COMMISSION

In the Matter of )  
 )  
THE TOLEDO EDISON COMPANY )  
and THE CLEVELAND ELECTRIC ) Docket No. 50-346  
ILLUMINATING COMPANY )  
 )  
(Davis-Besse Nuclear Power )  
Station) )

APPLICANTS' MOTION TO STRIKE  
TESTIMONY OF DR. ERNEST STERNGLASS

1. Applicants hereby move that the Atomic Safety and Licensing Board (Board) strike the testimony of Dr. Ernest Sternglass, filed by Intervenor in support of Issues 6, 7 and 8. As grounds for this motion, Applicants submit that the same methodology and arguments advanced by Dr. Sternglass in his testimony have already been considered and rejected in several AEC licensing proceedings at which Dr. Sternglass has had a full and adequate opportunity to defend them. This testimony should therefore be rejected on the basis of res judicata (including collateral estoppel).

2. For several years Dr. Sternglass has been advocating the view that the low-level releases of radioactive effluents from nuclear power plants (and releases from nuclear weapons tests) have resulted in significant

increases in infant mortality, cancer, genetic defects and heart disease. He has presented these views by testifying in several AEC licensing proceedings (Toledo Edison Co. (Davis-Besse Nuclear Power Station) construction permit proceeding; Consumers Power Co. (Midland Plant, Units 1 and 2) construction permit proceeding; Long Island Lighting Co. (Shoreham Nuclear Power Station) construction permit proceeding; Trustees of Columbia University proceeding). Dr. Sternglass also presented his views in testimony at the rule-making proceeding concerning proposed Appendix I to 10 CFR Part 50. He has now intervened as a party in the Duquesne Light Co. (Beaver Valley Power Station, Units 1 and 2) proceedings.

3. In each of the proceedings which have already been concluded (Davis-Besse construction permit, Midland, Shoreham and Columbia University), the Licensing Boards and the Appeal Board refused to adopt Dr. Sternglass' conclusions. In Trustees of Columbia University, ALAB-50, WASH-1218, 320, 336-349 (May 18, 1972), the Appeal Board received written testimony and heard oral statements and argument on the material presented by Dr. Sternglass. The Appeal Board, after detailed study of Dr. Sternglass' written and oral statements

concluded ... that Dr. Sternglass' allegations are not substantiated by the facts which he has presented

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\* At the Davis-Besse construction permit hearing, Dr. Sternglass was put forward by Intervenor as its witness and presented extensive oral testimony, followed by substantial cross-examination. January 7, 1971 (Tr. 765-833); January 27, 1971 (Tr. 1227-1328). Dr. Sternglass also testified on behalf of another intervenor. January 28, 1971 (Tr. 1335-1456)

in their support, and are premised at best on a highly questionable use of those facts. WASH-1218 at 338.

The Appeal Board stated that it

is of the opinion that Dr. Stern-glass' assertions have no valid scientific basis. We find that the methodology employed is deficient, that many of the assertions are inconsistent and even self-contradictory, and his statistical methods and selective sampling techniques are not scientifically credible. WASH-1218 at 343.

Based on their thorough evaluation, the Appeal Board concluded that Dr. Stern-glass' methodology and sampling techniques,

indeed, raise serious questions as to whether his presentation is consistent with even a moderate degree of scientific responsibility. WASH-1218 at 349.

See also The Toledo Edison Co. (Davis-Besse Nuclear Power Station), Initial Decision, paras. 42-43, 2 CCH At.En. L. R. ¶ 11,594 (March 23, 1971); Long Island Lighting Co. (Shoreham Nuclear Power Station), Initial Decision, LBP-73-13, RAI-73-4, 282-284 (April 12, 1973); Consumers Power Co. (Midland Plant, Units 1 and 2), Initial Decision, para. 66, 2 CCH At.En. L. R. ¶ 11,701.02 (December 14, 1972), affirmed ALAB-123, RAI-73-5 at 344-345 (May 18, 1973). His testimony herein is little more than a rehash of already rejected methodology and arguments. The only difference is that different data has been plugged into the same discredited theory. Based upon this record, Dr. Stern-glass'

testimony should be stricken.

4. That Dr. Sternglass is using the same methodology and arguments already litigated in the Davis-Besse and other proceedings is confirmed by the fact that Dr. Sternglass' testimony herein is supported by the same references which he used to support his earlier testimony. The attached Exhibit A lists those references used to buttress this methodology and arguments and lists the other proceedings in which Dr. Sternglass relied upon the same references.

5. Res judicata applies in administrative proceedings. United States v. Utah Construction & Mining Co., 384 US 394, 422 (1966); Retail Store Employees Union, Local 880, R.C.I.A. v. FCC, 141 US App DC 94, 436 F.2d 246, 254-55, n.39 (1970); Appalachian Power Co. v. EPA, \_\_F.2d\_\_, 5 ERC 1222, 1227 (4th Cir. 1973); Davis, Administrative Law Treatise, §18.02 (1970 Supp.); Toledo Edison Co. (Davis-Besse Nuclear Power Station), Memorandum and Order of the Atomic Safety and Licensing Board, pp.5-6 (July 10, 1973) (operating license phase). Its application in this case is particularly appropriate. Dr. Sternglass has already had more than ample opportunity to place his methodology and arguments before the Atomic Energy Commission, in the Davis-Besse proceeding as well as in other hearings. To provide yet another opportunity, in the words of the Fourth Circuit, "would normally be a useless exercise, wasteful and time-consuming and 'unnecessary' ..."

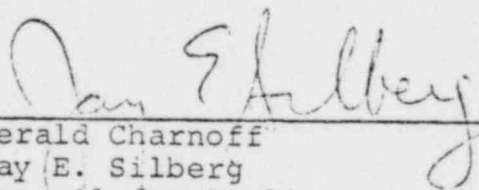
Appalachian Power Co., supra. Dr. Sternglass has had five occasions to place his theories before hearing boards. Applicants are aware of no justification for providing still another chance.

6. For the reasons set forth above, Applicants respectfully request that the testimony of Dr. Ernest Sternglass in this proceeding be stricken.\*

Respectfully submitted,

SHAW, PITTMAN, POTTS & TROWBRIDGE

By

  
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DATED: July 16, 1973

\* It is interesting to note that a recent study which Dr. Sternglass cites (Testimony on Issue 7, p.4), after a full review of all of Dr. Sternglass' papers, thoroughly and definitively rejected his methodology and his theories. Report of the Advisory Committee on the Biological Effects of Ionizing Radiations, Division of Medical Sciences, National Academy of Sciences/National Research Council, "The Effects on Populations of Exposure to Low Levels of Ionizing Radiation" (November 1972):

The evidence assembled by Sternglass has been critically reviewed by Lindop and Rotblat and by Tompkins and Brown. It is clear that the correlations

presented in support of the hypothesis depend on arbitrary selection of data supporting the hypothesis and the ignoring of those that do not. In several regards, the data used by Stern-glass appear to be in error. One of the most vital assumptions in the model - that without the atomic tests the infant mortality rate would have continued to fall in a geometrically linear fashion - is without basis either in theory or in observation of trends in other countries and other times. The doses of strontium-90 used in the experiments referred to by Stern-glass were of the order of 100,000 times greater than those received by humans from all the atomic tests and were associated with extremely small differences in infant mortality (8.7% in the irradiated vs. 7.5% in the control mice).

In short, there is at the present time no convincing evidence that the low levels of radiation in question are associated with increased risk of mortality in infancy. Hence, for the purposes of this report, no estimate of risks are considered to be applicable. Pp. 178-179 (omitting references).

EXHIBIT A

COMPARISON OF REFERENCES USED BY DR. STERNGLASS IN PRESENT  
PROCEEDING WITH THOSE USED IN PRIOR AEC PROCEEDINGS

<u>Reference</u>	<u>Cited in Present Proceeding</u>	<u>Prior Proceedings in Which Cited</u>
1. De Groot, "Statistical Studies of the Effect of Low-Level Radiation from Nuclear Reactors on Human Health" (1971)	Issue 7 (Ref. 2); Appendix 7-I (Ref. 12); Issue 8, Appendix 8-I (Ref. 5)	<u>Proposed Appendix I, Midland; Columbia University.</u>
2. Lave, Leinhardt and Kaye, "Low-Level Radiation and U.S. Mortality", Working Paper 19-70-1 (1971).	Issue 6, Appendix 6-II (Ref. 2); Issue 7 (Ref. 1); Issue 8, Appendix 8-I (Ref. 6)	<u>Proposed Appendix I; Midland; Columbia University.</u>
3. Sternglass, "Environmental Radiation and Human Health" (1971)	Issue 7 (Ref. 4); Appendix 7-I (Ref. 11); Issue 8, Appendix 8-I (Ref. 2)	<u>Proposed Appendix I; Midland, Columbia University.</u>
4. Sternglass, "Epidemiological Studies of Fallout and Patterns of Cancer Mortality" (1972)	Issue 7 (Ref. 5); Appendix 7-I (Ref. 10)	<u>Midland</u>
5. Sternglass, "Evidence for Low-Level Radiation Effects on the Human Embryo and Fetus" (1969).	Issue 8, Appendix 8-I (Ref. 4)	<u>Columbia University; Shoreham; Toledo Edison.</u>
6. Sternglass, "Infant Mortality and Nuclear Tests", Bull. of Atomic Scientists (1969).	Issue 8, Appendix 8-I (Ref. 3)	<u>Shoreham; Columbia University.</u>

Reference	Cited in Present Proceeding	Prior Proceedings in Which Cited
7. Sternglass, "Infant Mortality Changes Associated with Nuclear Waste Discharges from Research Reactors into the Upper Ohio Watershed" (1972).	Issue 6, Appendix 6-II (Ref. 3)	Proposed Appendix I
8. Sternglass, "Significance of Radiation Monitoring Results for the Shippingport Nuclear Reactor" (1973)	Issue 7, Appendix 7-I (Ref. 2)	This document is the same as Issue 6 Appendix 6-II.
9. Tseng, "Statistical Investigation of Possible Relationship between Nuclear Facilities and Infant Mortality", Thesis (1972)	Issue 7 (Ref. 3); Appendix 7-I (Ref. 13)	Proposed Appendix I; <u>Midland.</u>