RELATED CURRESPURIENCE SHAW, PITTMAN, POTTS & TROWERINGE A PARTNERSHIP OF PROFESSIONAL CORPORATIONS 1800 M STREET, N. W. WASHINGTON, D. C. 20036 '86 MAR 20 All :05 TELECOPIER (202) 822-1099 & 822-1199 DOCKETANA B9-2693 (SHAWLAW WSH) OFFICE OF SUCRET TELEPHONE JAY E. SILBERG, P.C. (202) 822-1063 March 18, 1986 Alan S. Rosenthal, Chairman Atomic Safety and Licensing Appeal Board U. S. Nuclear Regulatory Commission Washington, D. C. 20555 Dr. W. Reed Johnson Atomic Safety and Licensing Appeal Board U. S. Nuclear Regulatory Commission Washington, D. C. 20555 Mr. Howard A. Wilber Atomic Safety and Licensing Appeal Board U. S. Nuclear Regulatory Commission Washington, D. C. 20555 Re: The Cleveland Electric Illuminating Company (Perry Nuclear Power Plant, Units 1 and 2) Docket Nos. 50-440 and 50-441 0L Gentlemen: Enclosed for your information is a letter dated March 17, 1986 from the Advisory Committee on Reactor Safeguards to Chairman Palladino reflecting the ACRS' consideration of the January 31, 1986 Ohio earthquake. Very truly yours, 8603210113 860318 PDR ADOCK 05000440 Jay E. Silberg Counsel for Applicants JES:L Enclosure cc: Service List (w/encl.)



NUCLEAR REGULATORY COMMISSION ADVISORY COMMITTEE ON REACTOR SAFEGUARDS WASHINGTON, D. C. 20065

March 17, 1986

Honorable Nunzio J. Palladino Chairman U. S. Nuclear Regulatory Commission Washington, D. C. 20555

Dear Dr. Palladino:

SUBJECT: ACRS REPORT ON THE PERRY NUCLEAR POWER PLANT, UNIT 1

During its 311th meeting, March 13-15, 1986, the Advisory Committee on Reactor Safeguards discussed the Ohio earthquake which occurred on January 31, 1986 and reviewed its implications with respect to the Perry January 31, 1986 and reviewed its implications with respect to the Perry January 31, 1986 and reviewed its implications with respect to the Perry Nuclear Power Plant, Unit 1. A meeting of the Subcommittee on Extreme Nuclear Power Plant, Unit 1. A meeting of the Subcommittee discussed this matter during a The Reactor Operations Subcommittee discussed this matter during a meeting on February 12, 1986 and the full Committee was briefed during meeting on February 12, 1986 and the full Committee was briefed during the 310th ACRS meeting, February 13-15, 1986. During our review, we had the benefit of discussions with representatives of The Cleveland Electhe benefit of discussions with representatives of The Cleveland Electhe benefit of discussions with representatives of The Cleveland Electhe benefit of discussions with representatives of The Cleveland Electhe benefit of discussions with representatives of The Cleveland Electhe benefit of discussions with representatives of The Cleveland Electhe benefit of discussions with representatives of The Cleveland Electhe benefit of discussions with representatives of The Cleveland Electhe benefit of the documents referenced and comments from several ACRS consultants. We comments referenced and comments from several ACRS consultants. We comments referenced and comments from several ACRS consultants. We comments referenced and comments from several ACRS consultants.

This earthquake occurred near Leroy. Ohio, and was characterized by relatively low energy. low velocities, small displacements, a short duration, and a response spectrum rich in high frequencies. Except at the relatively less significant high frequencies, the excitation of the plant structures and equipment was much less than that considered in the seismic design basis.

No significant damage was observed at the Perry plant in the inspections which were performed by the Applicant and the NRC Staff. The Claveland which were performed by the Applicant and the NRC Staff. The Claveland Electric Illuminating Company, by using analysis and comparisons with prior qualification testing, has found that all the structures and prior qualification testing, has found that all the structures and equipment analyzed thus far have substantial margins of safety relative aquipment analyzed thus far have substantial margins of safety relative to the loads and stresses induced by the earthquake. The NRC Staff and our consultants concur in that conclusion.

The MRC Staff has several confirmatory actions that it will require of the Applicant prior to operation above 5 percent power. These confirmatory actions include the analyses of a large sample of equipment. We support the MRC Staff's proposed confirmatory actions.

There currently exists some possibility that the January 31, 1986 earthquake is related to deep well injection activities that took place between the Perry plant site and the town of Leroy or to solution mining

Honorable Munzio J. Palladino - 2 -

March 17, 1986

that took place in this area. The NRC Staff has engaged the services of USGS to evaluate these hypotheses to see if there really may be a causal connection, and, if so, whether there is any likelihood of substantially larger earthquakes in the future. The NRC Staff will keep the ACRS informed as to the progress of the USGS work.

One of the ACRS consultants suggested that monitoring with sensitive seismological instruments over the next few years would be helpful in assessing the possible causal connection between the deep well injection and the January 31, 1986 earthquake. The USGS representatives attending our discussions agreed that such seismic monitoring would be valuable. Therefore, unless the USGS and the NRC are able to decide that there is no causal connection or that earthquakes of a magnitude sufficient to be of concern can be ruled out from this cause, we recommend that The Cleveland Electric Illuminating Company assure that appropriately sensitive monitoring be continued over the next few years.

We agree with the NRC Staff that the January 31, 1986 earthquake is unlikely to lead to any requirements that would significantly change the design of the Perry plant's structure or its equipment. Based on the information developed in these meetings and considering the above comments, we find no reason to alter the conclusions stated in the Committee's report dated July 13, 1982 regarding operation of this nuclear plant.

Sincerely,

David A. Ward Chairman

References:

 The Cleveland Electric Illuminating Company, "Seismic Event Evaluation Report, Perry Nuclear Power Plant," dated February 1986
 Letter dated March 5, 1986 from Robert M. Bernero, Director,

 Letter dated March 5, 1986 from Robert M. Bernero, Director, Division of BWR Licensing, NRC, to David Ward, Chairman, ACRS, Subject: Perry Seismic Safety Evaluation, with attached Safety Evaluation Report dated March 1986

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

In the Matter of		
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY, ET AL.	Docket Nos.	50-440 50-441
(Perry Nuclear Power Plant,) Units 1 and 2)		

SERVICE LIST

Alan S. Rosenthal, Chairman
Atomic Safety and Licensing
Appeal Board
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dr. W. Reed Johnson
Atomic Safety and Licensing
Appeal Board
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Mr. Howard A. Wilber
Atomic Safety and Licensing
Appeal Board
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

James P. Gleason, Chairman 513 Gilmoure Drive Silver Spring, Maryland 20901

Jerry R. Kline
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Glenn O. Bright
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Atomic Safety and Licensing
Appeal Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Atomic Safety and Licensing
Appeal Board Panel
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Docketing and Service Section Office of the Secretary U. S. Nuclear Regulatory Commission Washington, D. C. 20555

Colleen Woodhead, Esquire
Office of the Executive Legal
Director
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Terry Lodge, Esquire Suite 105 618 N. Michigan Street Toledo, Ohio 43624

Ms. Susan L. Hiatt 8275 Munson Avenue Mentor, Ohio 44060

Donald T. Ezzone, Esquire Assistant Prosecuting Attorney Lake County Administration Center 105 Center Street Painesville, Ohio 44077

Atomic Safety and Licensing
Board Panel
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

John G. Cardinal, Esquire Prosecuting Attorney Ashtabula County Courthouse Jefferson, Ohio 44047