UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the matter of:

METROPOLITAN EDISON COMPANY et al.

(Three Mile Island Nuclear Station, Unit No. 1)

Docket No. 50-289

Restart

JUN 1 2 1981 >

PETITION TO RECONSIDER THE ADMISSIBILITY
OF THE TESTIMONY OF RAYMOND L. GOLDSTEEN, M.A.

AND NOW comes your Intervenor, Newberry Township [17] Steering Committee, by and through its counsel Jordan D. Cunningham, Esquire, and files this Petition to Reconsider and in support of this Petition, which seeks the admission of Mr. Goldsteen's testimony based on a longitudinal study of the psychological effects of the Three Mile Accident conducted in Newberry Township, Pennsylvania, between October 1979 and November 1980, Intervenor files the following:

- 1. In the field of psychometrics it is well accepted that a pure test cannot be devised, that is, a test that has no items connection or bias. See Harper, "Local Independence in Test Psychometrical", Volume 37, March 1972. With respect to the objections raised by the Board that items dealing with (1) perceived threat to physical health, (2) perceived threat to physical health of children and (3) demoralization contaminted the trust items of the study:
- (A) All but one trust item preceded these other items in the questionnaires so that item contamination could not have occured to any significant degree within the study.

8106150268

(B) There is only moderate correlation between trust and demoralization, perceived threat to physical health, and perceived threat-to physical health of children.

On the basis of this information it is suggested that item contamination is not a plausible theory to explain high levels of mistrust evidenced in the study of Newberry Township, Pennsylvania.

2. The criticism contained in the Order of the Board of May 1, 1981, concerning the validity of the demoralization scale is unfounded. The scale used in the study is a standardized mental health measure which has been tested for reliability and validity in many populations by experts in the field of mental health research and has been found to be acceptable.

The specific objection to the measure raised by the Board is that it creates demoralization where none might exist indicates a thoroughly incorrect understanding of the way in which the test was scored and interpreted. Single items scored in the study were not compared to a mid point above which demoralization is indicated and below which demoralization is not indicated. Rather, all items of the study were scored and summed to obtain a single demoralization score for each respondent which score is then compared to a score typical of the mental health patient population in that area. It is this comparison upon which conclusions regarding demoralization in a population are based. See Dohrenwend, Shrant, Egri, and Mendelsohn, "Measures of Non-Specific Psychological Distress and Other Dimensions of Psychopathology in the General Population". Archives on General Psychiatry 1980, Volume 37, pgs. 1229 and 1236. It should also be noted that the same demoralization measure was accepted

by the President Commission on the Accident at Three Mile Island as an indicator of psychological distress following the accident.

- 3. The cricitism contained in the Order of the Board of May 1, 1981, that the health items concerning cancer birth defects are biased is also unfounded in fact. The Order states that "there is a perception and there is a premise that getting cancer because of the accident exists and there is no opportunity in the poll to address whether that premise is correct or not". The same point was emphasized and set forth concerning the genetic effect items contained within the study. To the contrary, however, these items do not assume a direct relationship between the Three Mile Accident and such health effects as cancer and birth defects. Rather, they assume the commonly held and scientifically substantiated belief that there is a direct link between over exposure to radiation and such health effects and they measure whether or not the respondents perceived the event to have exposed him to levels of radiation sufficient to cause such effect.
- 4. In conclusion, the Board has not used a professional standard in evaluating the testimony presented and it is respectfully submitted that the objections raised by the Board have no merit by s ientific standards.

WHEREFORE, it is respectfully requested that the Board re-evaluate its Order of May 1, 1981, and admit so evidence into

the Record of this proceeding, the rebuttal testimony of Raymond L. Goldsteen, M.A. (Newberry Exhibit "1").

Respectfully submitted,

FOX, FARR & SUNNINGHAM

: Since

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:

METROPOLITAN EDISON COMPANY, :

Docket No. 50-289

et al.

Restart

(Three Mile Island Nuclear Station, Unit No. 1)

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Newberry

Township TMI Steering Committee's Petition to Reconsider the

Admissibility of the Testimony of Raymond L. Goldsteen, M.A. was

mailed First Class, postage prepaid, this 3rd day of June, 1981,

to the following:

Secretary of the Commission
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555
Attn: Chief, Docketing Service Section

Ivan W. Smith, Chairman Atomic Safety and Licensing Board U. S. Nuclear Regulatory Commission Washington, D. C. 20555

Dr. Walter H. Jordan 881 West Outer Drive Oakridge, Tenn. 37830

Dr. Linda W. Little 5000 Hermitage Drive Raleigh, N. C. 27612

George F. Trowbridge, Esq. SHAW, PITTMAN, POTTS & TROWBRIDGE 1800 1. Street, N.W. Washington, D.C. 20036

James A. Tourtellotte
Office of Executive Legal Director
U. S. Nuclear Regulatory Commission
Washington D. C. 20555

dordan D. Cunarngham, Esquire