

RELATED CORRESPONDENCE

November 9, 1984

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

In the Matter of)
)
METROPOLITAN EDISON COMPANY)
)
(Three Mile Island Nuclear)
Station, Unit No. 1))

Docket No. 50-289 SP
(Restart - Management Phase)

UCS' SUPPLEMENTAL RESPONSE TO
LICENSEE'S INTERROGATORIES U-15, U-20 AND U-43

UCS has reviewed Licensee's Interrogatories and UCS' previous responses for the purpose of determining which responses UCS can supplement at this time. Based upon that review, UCS provides the following supplemental responses:

U-15. Yes. UCS believes that simulator training is necessary because it is the only testing of assessment mechanism that approaches actual plant experience for these operators. By this response UCS does not intend to state any opinion as to the adequacy of GPU's particular simulator testing.

U-20. UCS believes that the examinations are not properly validated nor is their reliability established. UCS also believes that Licensee's oral examinations are administered by individuals who are not adequately trained to do so, and that the criteria for grading oral examinations are unstated and apparently utterly subjective.

D503

U-43. UCS intends to call Dr. James J. Regan.

(a) Dr. Regan's testimony concerns the design and evaluation of a personnel performance system.

(b) Dr. Regan's resume is attached.

(c) Dr. Regan has has no prior relationship to or contracts with UCS. Dr. Regan's sole relationship to UCS is his agreement to prepare testimony for this case.

(d) Dr. Regan has drawn on his background, experience and knowledge. He has been provided to date with a number of documents in this proceeding. While these are not "technical" n^o is it yet finally determined how many will be specifically reviewed for the purpose of preparation of the testimony, UCS nonetheless identifies them:

1. The Special Master's decision of April, 1982 and the ASLB decision of July, 1982. Pages 3-19 and 62-72 of the ALAB-772.

2. The Special Report of the Reconstituted OARP Review Committee, June 12, 1984.

3. The testimony on training issues filed by GPU in this remanded proceeding.

4. The depositions of Mssrs. Uhrig, Gardner, Ross, Long, Coe, Newton, Leonard.

5. Memorandum from B.P. Leonard, Operator Training Manager to Operator Training Section, January 27, 1984.

6. Operator Training Instructor Indoctrination Qualification Training Program, Rev. 1, April 26, 1983.

7. GPUM Instructor Development Program, Draft May 15, 1984

8. TMI Training Department Instructor Evaluation Procedure, Rev. 1, August 9, 1983.

9. Licensed Operator Requalification Program Description, June 12, 1984, 6211-ADM-2611.01.

10. Replacement Operator Training Program Description, approved July 31, 1981, 6211-ADM-2611.04.

11. GPU internal memoranda concerning Mssrs. Frederick and Olive.

(e) Dr. Regan has not consulted with anyone concerning the substance of his testimony. He has been provided some reference material by William Montague.

(f) See above.

(g) While his testimony is not yet written, Dr. Regan currently intends to make some use of the following:

John Joyner, et al., Handbook for Individualized Instruction, Human Resources Research Organization, Carmel, Cal., July, 1983

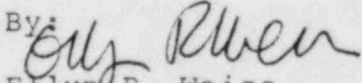
William E. Montague, et al., Instructional Quality Inventory, Navy Personnel Research Development Center, August, 1983.

John Ellis and Wallace H. Wulfeck II, "Criterion-Referenced Measurement in Military Technical Training", Chapter in The Role of Training in Military Personnel Systems (tentative title), Praeger Press (in press), 1985.

Robert Glaser and Lloyd Bond, eds., "Testing: Concepts, Policy, Practice and Research," American Psychologist, Vol. 36, No. 10, October, 1981.

In addition, he may refer to some of the material listed in response to (d) above.

(u) Dr. Regan has these documents.

By: 
Eilyn R. Weiss
HARMON, WEISS, & JORDAN
2001 S Street, N.W.
Suite 430
Washington, D.C. 20009
(202) 328-3500

Dated: November 9, 1984

RELATED CORRESPONDENCE

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OFFICE OF SECRETARY
OF DEFENSE
WASHINGTON, D.C.

RESUME

James J. Regan
9804 Bonnie Vista Drive
La Mesa, California 92041
Tel: (619) 460-3681

Date of Birth: 27 August 1924

EDUCATION

<u>Institution</u>	<u>Years</u>	<u>Degree/Date</u>	<u>Major</u>	<u>Minor</u>
University of Detroit	1942-48	Ph.B. 1948	Psychology	English Philosophy
Fordham University	1948-57	MA 1951 Ph.D. 1957	Psychology Psychology	None None

EMPLOYMENT HISTORY

(The following chronology of experience begins with my present job and works back)

EMPLOYER: University of San Diego

POSITION TITLE: Lecturer

DATES: Fall '82

DUTIES: Teach course in personnel management in School of Business Administration

EMPLOYER: Battelle Human Affairs Research Center

POSITION TITLE: Visiting Scientist

DATES: 1/83 to present

DUTIES: Technical consultation in personnel and management Sciences and Simulation.

EMPLOYER: Self

POSITION TITLE: Consultant

DATES: 8/82 to present

DUTIES: Technical consultation with various industrial and academic organizations in the areas of personnel selection, assignment, training, productivity, appraisal, job design, and simulation for personnel training and performance measurement.

EMPLOYER: Navy Personnel Research and Development Center, San Diego, Ca.

POSITION TITLE: Member of S. M. C. Advisory Board

DATES: 1982/83

DUTIES: Assist Navy Personnel Research and Development Center on the formulation and appraisal of its research program.

EMPLOYER: Navy Personnel Research and Development Center, San Diego, California

POSITION TITLE: Founding Technical Director

DATES: 9/73 to 7/82

DUTIES: Provide executive technical direction in the planning, conduct, and coordination of research and development activities directed toward the advancement of the Navy's technological base in the social, education, psychological and management sciences.

EMPLOYER: Naval Training Equipment Center, Orlando, Florida

POSITION TITLE: Chief Psychologist and Head, Human Factors Laboratory; Founding Director, Training Analysis and Evaluation Group

DATES: 7/66 to 9/73

DUTIES: Was fully responsible for developing and managing a program of psychological research, consultation and evaluation in the area of human factors and human learning. This program included laboratory research, consultation to engineers, research and development in adaptive training and computer-assisted instruction and experimental field evaluations of training systems. The staff was made up of experimental and engineering research psychologists. Projects were accomplished both "in-house" and under contract. Originated some projects, evaluated and approved submissions from the professional staff, monitored progress and evaluated the final product. I represented the laboratory to the research community and agencies of government. I functioned as principal consultant re human factors in training equipment to various agencies of the Army and Navy. As Head of the Training Analysis and Evaluation Group, organized and directed a multidisciplinary (engineers, educators, and psychologists) group of 40 scientists whose purpose was to develop and exploit new analytic techniques from various disciplines (e.g., systems engineering) in designing and evaluating major new training systems. These systems embodied what was being learned in the area of modern educational technology and cost effectiveness techniques.

EMPLOYER: Office of Naval Research, Navy Department, Washington, D.C.

POSITION TITLE: Assistant Head, Personnel and Training Branch

DATES: 4/65 to 7/66

DUTIES: The personnel and Training Branch of ONR develops and directs the Navy's contract program in personnel research and its members function as principal advisors to the Navy and other agencies. My duties involved participation with the Branch Head in the planning and implementation of the principal fundamental personnel research program in the Navy. I served as principal consultant to various government agencies in the area of training systems research; with the Branch Head, selected research areas in need of special emphasis and organized and conducted working conferences of specialists and edited proceedings; prepared syntheses of personnel research and wrote results for publication; managed major cooperative operational research programs; and joined with Branch Head in developing the major research program the DOD had in the area of computer-aided instruction. Functioned as Scientific Officer for major programs in criterion research and automated instructional research. Served as alternate Study Director, Personnel Research Study for the Assistant Secretary of Defense(M)'s Consolidated Training and Education Program Review. This involved a DOD-wide survey of evaluation of personnel research.

EMPLOYER: U.S. Naval Training Device Center, Port Washington, New York

POSITION TITLE: Psychologist to Head, Systems Psychology Division

DATES: 10/51 to 4/65

DUTIES: In addition to the duties of Systems Psychology Division Head described immediately below, I served as principal consultant to the Chief Psychologist, Commanding Officer and Director of the Naval Training Device Center, and other agencies in the area of training systems research. I functioned as the technical leader in a Center-wide methodological R&D effort in the area of training system development; functioned with the Chief Psychologist in formulating department-wide research goals.

As Head of Systems Psychology Division, I was responsible for technical and administrative planning, development, assignment, control and evaluation of research and consultation programs. These programs were in operating areas such as special weapons, guided missiles, tactical and team operations, and nuclear power. Research and consultation were in such

areas as human engineering (human servo-systems), educational psychology, training analysis, systems analysis, information theory, decision-making, small group behavior, perceptual skills, and complex sensory motor skills. In addition, varying amounts of time were spent as Acting Chief Psychologist. Indirectly supervised about 40 contract psychologists. Prior to these duties, served as Project Manager.

EMPLOYER: Dunlap and Associates, 429 Atlantic St., Stamford, Conn.

POSITION TITLE: Junior Research Associate

DATES: 3/15 to 10/51

DUTIES: Developed experimental designs for research projects in human engineering for government and industry, implemented projects by conducting experiments, field work, writing questionnaires; organized, analyzed and reported psychological data, and wrote technical reports.

EMPLOYER: Fordham University, New York, New York

POSITION TITLE: Junior Research Associate

DATES: 6/49 to 2/51

DUTIES: Duties included statistical analysis of data, construction of systems for qualitative analysis of kinescope recordings, participation in conferences on data analysis techniques, technical report writing and editing. Conducted testing and television sessions at Kings Point Merchant Marine Academy, constructed, administered and analyzed achievement tests, observed and critiqued educational television sessions.

EMPLOYER: Fordham University, New York, New York

POSITION TITLE: Research Assistant

DATES: 9/49 to 6/50

DUTIES: This was an honorary appointment on the basis of scholastic achievement. Duties included substitute teaching, organizing graduate school entrance exams, assisting in psychological laboratory courses, and constructing college examinations.

EMPLOYER: Fordham University, New York, New York

POSITION TITLE: Research Assistant

DATES: 1/49 to 6/49

DUTIES: Honorary appointment on basis of scholastic achievement.
Laboratory assistant, examination proctor and grader;
reorganized test library.

PUBLICATIONS

- Crissy, W. J. E. & Regan, J. J. Halo in the employment interview. Journal of Applied Psychology, 1951, 35, 338-341.
- Regan, J. J., Ely, J. H. & Kelley, C.R. Flying the submarine. In Office of Naval Research, A decade of basic and applied science in the Navy. Washington: ONR, 1957. Pp. 535-539.
- Regan, J. J. Tracking performance related to display control configurations. Unpublished doctoral dissertation, Fordham University, 1957.
- Regan, J. J. Tracking performance related to display control configurations. Technical Report 322-1-2, January 1959, U.S. Naval Training Device Center.
- Regan, J. J. Tracking performance related to display control configurations. Journal of Applied Psychology, 1960, 44, 310-314.
- Regan, J. J. A method for determining training device requirements. Office of Naval Research: Proceedings of the Fifth Navy Science Symposium, April 1961. Vol. 2, Pp. 740-749.
- Regan, J. J. & Bishop, C. K. Programmed instruction in the Armed Forces--an overview. In S. Margulies & L. D. Eigen (Eds.), Applied Programmed Instruction. New York: Wiley, 1962. Pp. 59-69.
- Regan, J. J. Automated instructional hardware and software: An overview. Proceedings of the American Institute of Industrial Engineers, Inc., 1964. Pp. 325-330.
- Regan, J. J. Navy plans for computer-assisted instruction (CAI). National Security Industrial Association: Proceedings of the Engineering Systems for Education and Training Conference, 1966. Pp. 145-147.
- Regan, J. J. Computer-assisted instruction (CAI): Some facts and fancies. Washington University, School of Continuing Education, Research Publication Number 11, 1967. Pp. 38-49.
- Regan, J. J. New outlooks in training: A discussion. Manpower Research, N. A. B. Wilson (Ed.) London: English University Press, Ltd., 1969. Pp. 364-375.
- Regan, J. J. Special Editor, Special Issue: Adaptive Training, Journal of the Human Factors Society, Dec. 1969, Vol. II, Number 6.
- Blaiwes, A. S. & Regan, J. J. An integrated approach to the study of learning, retention and transfer--a key issue in training device research and development. Technical Report IH-178, August 1970, Naval Training Device Center.
- Regan, J. J. Engineering systems in education and training. A report on the 1970 (11th) Annual IEEE Man-Machine Systems Symposium, November 1970. Applied Ergonomics, London, June 1971.

Regan, J. J. A roundtable by mail. Human Factors: Theory and Practice, David Meister (Ed.). New York: Wiley-Interscience, 1971.

Bryan, G. L. & Regan, J. J. Training system design. Human engineering guide to equipment design. Washington: GPO, 1972.

Blaiwes, A. S., Puig, J. A. & Regan, J. J. Transfer of training and the measurement of training effectiveness. Human Factors, December 1973.

Regan, J. J. Components of human performance and training system design. Presentations and Technical Notes from the Applied Learning Systems Curriculum Requirements Symposium, Washington: American University, 11-12 March 1975.

Blaiwes, A. S. & Regan, J. J. Military Training Devices - Progress and Issues. Chapter in The Role of Training in Military Personnel Systems (Tentative title). New York: Praeger Press (in press), 1985.

PRESENTATIONS

- 1960 The Role of the Monitor in Federal Research. Paper read at the American Psychological Association Convention, Chicago, Ill.
- 1961 Training Analysis Methods. Paper read at Anti-Submarine Warfare Symposium, New York, N.Y.
- 1962 Human Engineering at the Naval Training Device Center. Paper read at the Human Factors Society meeting, New York, N.Y.
- 1962 A Scheme for Training Systems Analysis. Paper read at Anti-Air Warfare Symposium, Norfolk, VA.
- 1964 Methods for Task Analysis. Paper read at Human Factors Society annual meeting, Washington, D.C.
- 1966 Computer-Assisted Instruction. Presentation to American Management Association's Continuing Seminar on Management Information Systems, Boca Raton, FL.
- 1967 Computer-Assisted Instruction. Presentation to Naval Research Reserve Unit, Orlando, FL.
- 1967 Computer-Assisted Instruction. Presentation made to Industrial College of the Armed Forces/U.S. Military Academy Computer Workshop sponsored by the ICAF and USMA and held at West Point. Remarks videotaped for subsequent review by interested activities.
- 1967 Participated in a Symposium at the North Atlantic Treaty Organization Conference on Manpower Research in the Defense Context. London, England.
- 1967 Educational Technology. Presentation to Data Processing Management Association, Winter Park, FL.
- 1967 Changing World of Training Research. Invited lecture given at Naval Academy.
- 1968 Computer-Assisted Instruction--An Overview. Presentation to State Conference, American Society for Training and Development, Orlando, FL.
- 1968 Learning Research and Training Practice. Presentation to Central Division, American Society for Training and Development, Orlando, FL.
- 1969 Workshop on Programmed Instruction given at American Hospital Association Regional meeting, Miami, FL.
- 1969 Faculty member and lecturer, American Hospital Association seminar on Leadership for Florida Hospital Auxiliary presidents.

- 1970 Motivation and Interpersonal Relations in a Leadership Context. Presentation to American Hospital Association seminar, Orlando, FL.
- 1970 Learning and Transfer Issues in the Design of Training Systems. Presentation to the NATO Advanced Study Institute, Greenwich, England.
- 1972 Organized and chaired a Symposium on Special Skill Training at the annual meeting of the Southeastern Psychological Association, Atlanta, GA.
- 1973 Learning Theory and Training Practice. Invited address at annual meeting of American Psychological Association, Montreal, Canada.
- 1984/85 One-day seminars at University of Central Florida. Title: The Design of Training Systems.

PROFESSIONAL SOCIETIES

American Association for the Advancement of Science

New York State Psychological Association

Eastern Psychological Association

Senior Member, Institute of Electrical and Electronic Engineers

Human Factors Society

The American Educational Research Association

Sigma Xi

Fellow, American Psychological Association

Ergonomics Research Society

MISCELLANEOUS RECOGNITION (e.g., Honors, Awards, & Committee Appointments)

- 1949-51 Graduate Research Assistant; three appoints--Spring 1949, academic year 1949-50, academic year 1950-51.
- 1962 Chairman, Symposium on Special Training Problems, New England Psychological Association, Boston, Mass.
- 1962-63 Member Program Committee of the Society of Engineering Psychologists of the American Psychological Association.
- 1964 Chairman Program Committee of the Society of Engineering Psychologists of the American Psychological Association.
- 1968 Chairman of Plenary Session on Adaptive Training, New England Psychological Association annual meeting, Boston, Mass.
- 1969 Invited to address joint meeting of IEEE (GMMS) and Ergonomics Society held at Cambridge University, United Kingdom. (declined)
- 1970 General Chairman 1970 IEEE Man-Machine System Annual Symposium, Winter Park, FL.
- 1971 IEEE Engineer of the Year for Central Florida.
- Current Registered Psychologist, New York State
- 1966-69 Member, Computer-Assisted Education Advisory Board, Naval Academy, Annapolis, MD.
- 1968-71 Member, Administrative Committee of the Systems, Man and Cybernetics Group of the Institute of Electrical and Electronic Engineers.
- 1970-73 Member, National Academy of Sciences, National Research Council. Armed Forces - NRC Committee on Vision: Working Group on Visual Requirements for Cockpit Simulators.
- 1971 Member, The U.S. Army Armor School Advisory Committee, Fort Knox, KY.
- 1971 Chairman, Session on the Roles and Controls of Personnel Research and Development in the DOD at a Symposium/Seminar on Personnel Research and Development Planning and Management at Temple University in Philadelphia, PA.
- 1972 Session Chairman, Target Acquisition Symposium, Office of Naval Research sponsored meeting, Orlando, FL.
- 1973-75 Member Membership Committee, Society of Engineering Psychologists, American Psychological Association.
- 1974 Member, Advisory Committee on Human Resources Research and Development, Naval Air Systems Command, Washington, D.C.

- 1974 United States Representative to 10th Applied Military Psychology Symposium, West Germany.
- 1975 Chairman of Symposium, Evaluation of Basic and Applied Research, American Psychological Association of Eighty-Third Annual Convention, Chicago, IL.
- 1980 Chairman, Fellows Committee, Society of Engineering Psychologists, American Psychological Association.
- 1981 Chairman, Membership Committee, Society of Engineering Psychologists, American Psychological Association.
- 1981-82 Chairman of National Advisory Committee to Nuclear Regulatory Commission-Committee advises on personnel qualifications matters.
- 1983 Member of National Advisory Committee to Nuclear Regulatory Commission; Committee addresses our simulator requirements for nuclear power plant operators.
- Current Licensed Psychologist, California.

HONORS, AWARDS IN THE FEDERAL SERVICE

Federal Service Outstanding Performance Rating:

1956	1976
1960	1977
1961	1978
1962	1979
1975	1980

Sustained Superior Performance:

1974	1979
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- 1960 Naval Training Device Center nominee for Federal Business Association's Award for Outstanding Federal Service
- 1960 Naval Training Device Center nominee for William A. Jump Memorial Award
- 1961 Naval Training Device Center nominee for Federal Business Association's Award for Outstanding Federal Service
- 1961 Naval Training Device Center Alternate nominee for National Civil Service League Career Service Award
- 1962 Naval Training Device Center and Office of Naval Research nominee for Arthur S. Fleming Award
- 1982 Navy Superior Civilian Service Award

November 9, 1984

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

In the Matter of)	
METROPOLITAN EDISON COMPANY)	
(Three Mile Island Nuclear Station, Unit No. 1))	Docket No. 50-289 (Restart Remand on Management)

CERTIFICATE OF SERVICE

I hereby certify that copies of the UCS' SUPPLEMENTAL RESPONSE TO LICENSEE'S INTERROGATORIES U-15, U-20 AND U-43, were served on the following by deposit in The United States mail, first class, postage prepaid, on November 9, 1984.

Ellyn R. Weiss

Ellyn R. Weiss

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
) (Restart Remand on
(Three Mile Island Nuclear) Management)
Station, Unit No. 1))
)

SERVICE LIST

Administrative Judge
Gary J. Edles, Chairman
Atomic Safety & Licensing Appeal Bd.
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Jack R. Goldberg, Esq.
Office of the Executive Legal Dir.
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Administrative Judge
John H. Buck
Atomic Safety & Licensing Appeal Bd.
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Ernest . Blake, Jr. Esquire *
Shaw, Pittman, Potts & Trowbridge
1800 M Street, N.W.
Washington, D.C. 20036

Administrative Judge
Christine N. Kohl
Atomic Safety & Licensing Appeal Bd.
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Ms. Louise Bradford
TMI Alert
1011 Green Street
Harrisburg, PA 17102

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

Joanne Doroshaw, Esquire
The Christic Institute
1324 North Capitol Street
Washington, D.C. 20002

Administrative Judge
Sheldon J. Wolfe
Atomic Safety & Licensing Appeal Bd.
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. and Mrs. Norman Aamodt
R.D. 5
Coatesville, PA 19320

Administrative Judge
Gustave A. Linenberger, Jr.
Atomic Safety & Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Lynne Bernabei, Esq.
Government Accountability Project
1555 Connecticut Ave.
Washington, D.C. 20009

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

Michael F. McBride, Esq.
LeBoeuf, Lamb, Leiby & MacRae
1333 New Hampshire Ave, N.W. #1100
Washington, D.C. 20036

Michael W. Maupin, Esq.
Hunton & Williams
707 East Main Street
P.O. Box 1535
Richmond, VA 23212

Thomas Y. Au, Esq.
Office of Chief Counsel
Department of Environmental Resources
505 Executive Houses
P.O. Box 2357

Harrisburg, PA 17120

* HAND DELIVERED