UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

OCT 12 1979

MEMORANDUM FOR: Chuck Miller
TMI Incident Investigating Group

FROM: Peter J. Goldman, Director
Management Development and Training
Office of ADministration

SUBJECT: SAFETY TRAINING FOR NRC EMPLOYEES

Per our discussion, attached is the brochure on the MIT courses, information on our statistical courses and the listing of courses taken in FY-79 by title, training facility and participant.

I appreciate your preliminary contact with Jim Jerome and Jack Mansfield; I have already gotten material from USC and am waiting on GW's material. Jack Ledoux has provided some data on MORT.

Let me know if I can be of further assistance. I think you and your questions have been of great assistance to me.

Peter J. Goldman, Director
Management Development and
Training Staff
Office of Administration

Attachments:
As stated

5-1 65

(# = number of attendees)

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Course Title	Facility	Duration	Organization
Health Physics Radiation Accidents (3)	Oak Ridge Associated Universities Oak Ridge, TN	1/22/79 to 1/26/79	IE:RI (3)
Mechanical Reliability and Probabilistic Design for Reliability Systems (I)	George Washington University	10/30/78 to 11/03/78	NRR:DSS (I)
SE 535 - Systems Feedback Control (I)	University of Pennsylvania	9/05/78 to 12/23/78	IE:RI (I)
Qualification of Safety Related Equipment (2)	Drexel University	11/13/78 to 11/15/78	IE:RIV (I) NRR:DOR (I)
Radiation Protection (I)	Geological Institute of Technology	12/04/78 to 12/15/78	NRR:DSE (I)
Applied and Probability Statistics 400 (I)	University of Maryland	1/09/79 to 5/01/79	RES (I)
ME 578 Radiation Detection (I)	Catholic University of America	1/13/79 to 4/27/79	NRR:DSE (I)
Nuclear Criticality Safety Specialist (4)	University of New Mexico	5/21/79 to 5/25/79	NMSS:FC (I) IE:RII (2) IE:RI (I)
ME - 582 Reactor Theory II (I)	Catholic University of America	1/15/79 to 4/27/79	NRR:DSE (I)
MEB - 573 Environment Impact of Energy (I)	Catholic University of America	1/15/79 to 4/27/79	NRR:DSE (I)
Basic Radiation Protection (I)	Harvard University	3/26/79 to 3/30/79	NRR:DOR (I)
Radioactive Waste Management (I)	Professional Development Program	5/21/79 to 5/25/79	NRR:DSS (I)
Radiological Health Physics (I)	University of Lowell	5/14/79 to 5/25/79	NMSS:FC (I)
Application of Reliability and Risk Analysis (I)	George Washington University	4/23/79 to 4/27/79	ACRS (I)

Course Title	Facility	Duration	Organization
22.965 (Part I) Thermal Power Reactors (7)	Massachusetts Institute of Technology	7/09/79 to 7/13/79	NRR:DOR (5) NRR: DPM (I) NRR:DSS (I)
22.955 General Safety Issues (9)	Massachusetts Institute of Technology	7/09/79 to 7/13/79	NRR:DOR (I) NRR:DPM (2) NRR:DSS (5) RES (I)
Engineering and Risk Assessment System Reliability (I)	JBF Associates	6/11/79 to 6/15/79	RES (I)
Planning for Nuclear Emergencies (3)	Harvard University	5/14/79 to 5/18/79	SD (2) OCM (I)
7915 Fluid Transcripts in Closed Conduits (I)	University of Michigan	7/09/79 to 7/13/79	NRR:DSS (I)
Nuclear Quality Assured Coating Work (2)	Institute of Applied Technology	5/14/79 to 5/18/79	IE:RIII (2)
Crowd and Spectator Violence (I)	International Association of Chief of Police	6/12/79 to 6/22/79	NMSS:SG (I)
Nuclear Power Reactor Safety (3)	Massachusetts Institute of Technology	7/08/79 to 7/14/79	SD (I) NRR:DOR (I) NRR:DSE (I)
TMI Transient Conference (36)	Babcock and Wilcox	6/28/79	NRR:DPM (3) IE:RI (5) IE:RII (13) IE:RIII (7) IE:RIV (2) IE:RV (2) IE:HQ (3)
Prediction Analysis (I)	ASA	8/11/79 to 8/12/79	MPA (I)
Safety of Light Water Cooled Nuclear Power Plants (I)	Northwestern University	9/24/79 to 9/28/79	MPA (I)
Reliability Theory (I)	George Washington University	9/01/79 to 12/19/79	MPA (I)

OBJECTIVES AND METHODS OF STATISTICS - I

Spring 1979 -- Bethesda, Maryland

Location: Room 6110, Maryland National Bank Building.

Time: Sessions are held on Tuesdays and Thursdays, starting February 6, 1979. All sessions start at 10:00 a.m. and end at 11:30 a.m., allowing time for post-class discussion of interesting and/or vexing problems.

Purposes:

*To acquaint participants with objectives and methods of statistics, both as science and art.

*To show how these objectives are achieved.

*To describe and justify basic types of methods employed in statistical analysis.

*To illustrate techniques with examples from wide variety of technical, administrative, and managerial applications.

*To foster a general appreciation of statistics and to recognize where statistics is misused.

Prerequisites: No formal course in statistics is required; we start from scratch! No calculus or mathematics course above algebra is required. Our approach will be primarily through common sense and some intuition.

Text: William Mendenhall and Lyman Ott, Understanding Statistics, 2nd Edition, Duxbury Press, North Scituate, MA, 1976.

Instructor: Dan Lurie, Ph.D., Applied Statistics Branch 8706 Maryland National Bank Building. 49-27851

SCHEDULE

Unit No.	Topic(s)	Scheduled Dates	Text Chapter(s)
1	What is/are Statistics? Graphical Methods	2/6 - 2/8	1, 2
2	Numerical Inferences	2/13 - 2/15	3
3	Probabilistic Concepts	2/20 - 2/22	4
4	Binomial Experimentation	2/27 - 3/1	5
5	The Normal Distribution	3/6 - 3/8	6
6	Testing Hypotheses	3/13 - 3/15	7
7	Estimation Techniques	3/20 - 3/22	8
8	Catch-up and Wrap-up	3/27 - 3/29	--

OBJECTIVES AND METHODS OF STATISTICS - II

Schedule

Unit No.	Topic(s)	Scheduled Dates	Text Chapter
9	Comparisons	4/17, 4/19	9
10	Interference from Small Samples	4/24, 4/26	10
11	Linear Models and Correlation	5/1, 5/3	11
12	Experimental Design; Testing Equality of Variances	5/8, 5/10	12, 13
13	Analysis of Variance	5/15, 5/17	14
14	Contingency tables; Catch-up and Wrap-up	5/22, 5/24	15

Distribution of Participants by office and by offering

Office	start September 25, 1978	start April 10, 1978	start February 6, 1979
NRR	24	5	6
RES		3	6
SD		4	5
NMSS		3	4
ADM		2	
CON		2	
EEO		1	
ELD		1	
MPA		2	
IP		1	
SP		1	
IE			5
Total	24	25	26

IBE course, covering the identical material, and using the same [illegible] in two parts each part covered in one full week (about 35 hours) The number of participants is shown in parentheses

part I July 24-28, 1978 (12) part II January 15-19, 1979 (6)