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March 15, 1984

822-1215

Administrative Judge
Gary J. Edles, Chairman
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Washington, D.C. 20555

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

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

In the Matter of
Metropolitan Edison Company
(Three Mile Island Nuclear Station, Unit No. 1)
Docket No. 50-289

Dear Chairman Edles and Administrative Judges Buck and Kohl:

In accordance with our practice of notifying the Appeal Board and the parties of changed circumstances or new information on issues under consideration, Licensee hereby provides the following information.

As stated in the enclosed press release, Messrs. Lawrence L. Humphreys and Warren F. Witzig have been elected to GPU Nuclear Corporation's board of directors. Along with Mr. Robert V. Laney, who was elected to the board in January, Messrs. Humphreys and Witzig will make up the Nuclear Safety and Compliance Committee,

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Administrative Judge Gary J. Edles
Administrative Judge John H. Buck
Administrative Judge Christine N. Kohl
March 15, 1984
Page Two

established by GPU in order to provide further assurance that TMI-1 will be operated safely.

Licensee has conducted another status report on its progress toward completion of required actions identified in the February, 1983 BETA Report. (Earlier status reports were provided to the Appeal Board and the parties by Licensee's counsel on July 26 and November 3, 1983.) Enclosed is a copy of the current status report, along with a cover memorandum transmitting the report from Mr. P. R. Clark, President, GPU Nuclear, to the Chairman of the Board of Directors, GPU Nuclear.

In December, 1983, at GPU Nuclear's request, a group of QA shift monitoring engineers and their supervisors participated in an Institute of Nuclear Power Operations (INPO) training program on INPO evaluation techniques. Enclosed is a letter from E. P. Wilkinson, President of INPO, to Philip R. Clark, President, GPU Nuclear Corporation, which forwards two INPO memoranda commenting on Licensee's shift monitor program. Also enclosed is a memorandum from R. L. Long, Licensee's Vice President-Nuclear Assurance, to Mr. Clark responding to the INPO comments.

Licensee has revised its restart schedule to include work on reactor coolant pump IB prior to precritical non-nuclear hot functional testing. This work will not impact Licensee's scheduled capability of June 1, 1984 criticality. Licensee also has scheduled the completion of other major work items and surveillances in order to take best advantage of the "precritical" period. Enclosed is a letter from Mr. H. D. Hukill, Director, TMI-1, to Mr. H. Denton, Director, Office of Nuclear Reactor Regulation, reflecting this revised work schedule.

Respectfully submitted,

Deborah B. Bauser

Deborah B. Bauser
Counsel for Licensee

DBB:jah
Enclosures
cc: Attached Service List

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Commission

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

Docket No. 50-289

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Nuclear Station**

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For Release:

Immediately

Date:

February 23, 1984
#22-84.1

News Release

GPU Nuclear

Public Information Services

GPU NUCLEAR ELECTS DIRECTORS, COMPLETING SAFETY COMMITTEE

Middletown, PA -- GPU Nuclear Corporation today announced the election of Lawrence L. Humphreys and Warren F. Witzig to the GPU Nuclear board of directors. Along with Robert V. Laney, who was elected to the board in January, Humphreys and Witzig will make up a Nuclear Safety and Compliance Committee to monitor the operation and maintenance of the GPU System's nuclear units with specific attention to adherence to procedures and license requirements. Laney is chairman of the committee.

Election of the three men, who were drawn from outside the GPU System, and the establishment of the Nuclear Safety and Compliance Committee fulfill a GPU decision announced last November that was intended to provide further assurance that Three Mile Island Unit 1 will be operated safely when the plant is restarted. The board-level Nuclear Safety and Compliance Committee will have an independent staff of its own.

Philip R. Clark, Sr., president and chief executive officer of GPU Nuclear, said, "These three men were drawn from outside the GPU System to broaden the range of experience and perspective on the GPU Nuclear board of directors. Their presence on the board and as a Nuclear Safety and Compliance Committee will provide additional depth to the management of our nuclear facilities. We are pleased to have such highly qualified individuals in these positions."

-more-

As previously announced, John F. O'Leary, former Deputy Secretary of the U.S. Department of Energy and an independent energy consultant in Washington, D.C., has been elected as the outside chairman of the GPU Nuclear board. The board now has a full complement of seven directors from within the GPU System and four outside directors.

Humphreys has served since 1980 as chief executive officer of UNC Nuclear Industries. He worked from 1968-80 for electric utilities, attaining the position of executive vice president and holding responsibilities in nuclear plant engineering and construction, safety, regulatory compliance and steam plant operation. He worked from 1960-68 at research and development facilities of the federal government near Richland, Washington, attaining the position of nuclear reactor supervisor. Humphreys holds a bachelor of science degree in chemistry from Linfield College, McMinnville, Oregon, and master of science degree in chemistry from Oregon State University.

Witzig is chairman of the Nuclear Engineering Department at Pennsylvania State University, where he also has served as a professor since 1967. He served from 1960-67 as senior vice president and a director of NUS Corporation, a nuclear consulting firm. He worked in various nuclear research programs from 1942-60 and now is engaged in research in the disposal of radioactive waste, nuclear fuel cycle and emergency planning. He holds a bachelor of science degree in electrical engineering from Rensselaer Polytechnic Institute, Troy, New York, and a master of science degree in electrical engineering and a doctor of philosophy degree in physics, both from the University of Pittsburgh.

As reported previously, Laney is a consultant in nuclear and energy project management.

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Subject: Fourth Quarter 1983 Status Update -
GPUNC Responses to Recommendations of
Basic Energy Technology Associates, Inc.
Set Forth in their Report Dated February 28, 1983

Date: February 29, 1984

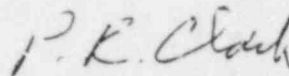
From: P. R. Clark
President

Location: Parsippany

To: Chairman, GPU Nuclear Corporation
Board of Directors

A commitment was made to the Board to provide a quarterly report on progress toward completion of required actions identified in the BETA Report. The fourth quarter 1983 Status Update is attached, in which 37 additional open items have been completed, leaving 32 of an original 156 recommended actions in progress or under evaluation.

This Status Update will also be provided to the Atomic Safety and Licensing Appeal Board through the offices of Shaw, Pittman, Potts, and Trowbridge.



P. R. Clark

PRC/FLD:sms
Attachment
0050i/22

cc:

GPU Nuclear Corporation Board of Directors

H. M. Dieckamp
L. L. Humphreys
E. E. Kintner
W. G. Kuhns
R. V. Laney
J. R. Leva
J. F. O'Leary
F. J. Smith
W. A. Verrochi
W. F. Witzig

GPU Nuclear Corporation Directors

R. P. Fasulo
P. B. Fiedler
I. R. Finfrock
W. L. Gifford
R. W. Heward
H. D. Hukill
B. K. Kanga
R. L. Long
F. F. Manganaro
D. G. Murray
R. F. Wilson

**RESPONSES TO RECOMMENDATIONS OF
BASIC ENERGY TECHNOLOGY ASSOCIATES, INC.
AS SET FORTH IN THEIR REPORT DATED FEBRUARY 28, 1983**

SORT BY BETA FINDING

**GPU NUCLEAR CORPORATION
FOURTH QUARTER 1983 STATUS UPDATE
FEBRUARY 27, 1984**

Preface

The review of current and projected expenditures and manpower utilization for GPU Nuclear Corporation conducted by Basic Energy Technology Associates, Inc. (BETA) was issued in a report dated Feb. 28, 1983.

The focus of the review was on resources devoted to Three Mile Island Unit 1 and Oyster Creek. A total of eighty-five (85) findings resulted in one hundred fifty-six (156) separate recommendations.

This report represents the GPUNC Response. The 156 recommendations (paraphrased) have been assigned to one of five (5) broad categories:

- I. Organization - understanding and working within the functional GPUN structure.
- II. Manning - appropriate staffing levels.
- III. Operating/Management Efficiency/Productivity
- IV. Personnel-Related Matters - personnel practices.
- V. Training

Within each of the above categories, responses have been placed into one of five classifications (STATUS CODE):

- A. Agree - Complete: agree with recommendation, action is complete.
- B. Agree - Action Underway/Goal: agree with recommendation, action is underway and/or action is a 1983 goal.
- C. Agree - Action to be Scheduled: agree with recommendation, action to be taken in the future.
- D. Under - Evaluation: either recommendation or appropriate action is under evaluation.
- E. Disagree: disagree with recommendation.

This report is sorted by BETA finding and recommendation.

Appendix A provides a listing of those GPUNC 1983 Corporate and/or Division Goals and Objectives referenced in recommendation responses contained in this report.

The GPUNC Response Report (sorted by BETA finding) will be updated quarterly. This revision contains the 4th quarter 1983 updated status. Since the last update, 37 additional open items have been completed (as noted by asterisk in the comment column) for a total complete or disagree of 124. Thirty-two items remain open.

2/27/84

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BETA REPORT - GPUNC RESPONSES BY BETA FINDING

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
<u>TMI-1 Findings & Recommendations</u>					
<u>Finding III-A:</u> The role of the Director, TMI-1 needs to be clarified and strengthened with respect to his over-all site responsibilities.					
III-A (a)	Rec: Office of the President foster understanding of how functional organization should operate. Resp: Continuing effort reflected in Corporate Objective 5. In 1983, Corporate Goal 9 & Management Training Program respond directly.	I.	O/P	A	Complete * * Substantial Completion.
III-A (b)	Rec: Continue emphasis on support role of non-plant divisions. Resp: Continuing effort reflected in Corporate Objective 5. * Added specific wording to Plant Division Functions * Strengthened Plant Division role in Budget Process	I.	O/P	A	Complete * * Substantial Completion.
III-A (c)	Rec: Emphasize elimination of jurisdictional disputes. Resp: Covered in Corporate & Divisional Staff Meetings & during Inter-divisional work progress/status meetings. Substantial improvement achieved.	I.	O/P	A	Complete
III-A (d)	Rec: Encourage support and working within new organization. Resp: Being met by TMI-1 Goal 2. TMI Division Staff meetings included Support Divisions and this issue was addressed directly and indirectly.	I.	TMI-1	A	Complete *
III-A (e)	Rec: Encourage freer discussion among divisions. Resp: 1983 Corporate Goal 9 directly addresses issue.	I.	O/P	A	Complete *
III-A (f)	Rec: Encourage upward not downward corporate policy complaints. Resp: Continuing effort reflected in Corporate Objective 5. 1983 Corporate Goal 9 and management program respond directly.	III.	O/P	A	Complete *
<u>Finding III-B:</u> The positions for five "engineers" presently reporting to the TMI-1 Manager. Plant Operations should be better defined.					
III-B	Rec: Better define role of five engineering positions reporting to Plant Operations. Resp: There are five operational engineers assigned to Plant Operations. Position descriptions have been prepared. Positions have been reviewed and are considered appropriately located within the organization. (Five positions are 2 Primary Plant Engineers, 1 Secondary Plant Engineer, 1 Radwaste Engineer and 1 Trainee.)	II.	TMI-1	A	Complete

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
<u>Finding III-C:</u>	Maintenance at TMI-1 can improve its support of the plant.				
III-C (a)	Rec: Schedule more day shift maintenance work and ensure stronger supervisory support. Resp: Personnel changes have been implemented to ensure strong supervisory support on day shift. Complete but will monitor for proper implementation.	III.	TMI-1	A	Complete
III-C (b)	Rec: Assign system responsibility in Plant Engineering for maintenance tasks. Resp: Estimate completion 2nd quarter 1984. The Plant Engineering Director has made a trip to Oyster Creek to review their revised Plant Engineering organization. A proposal for revising the Engineering organization at TMI 1 will be submitted to O/P. Our goal is to assign responsibility for each plant system to a specific engineer; i.e., establish a program of "system experts".	I.	TMI-1	B	2nd Q 1984
III-C (c)	Rec: Delay assignment of corrective maintenance function to M&C until after Unit 1 restart. Resp: Re-evaluation postponed to 3rd Q 1984.	I.	O/P	C	3rd Q 1984
<u>Finding III-D:</u>	Major deficiencies in the chemistry program at TMI-1 were identified two years ago. Corrections have been slow.				
III-D	Rec: Upgrade of chemistry program, key manager, standardize analytical procedures. Resp: The formal Chemistry Upgrade Program has been completed and the Plant Chemistry Department is prepared to support restart and extended plant operations. An NRC audit of the Chemistry Program in November 1983 confirmed the readiness of the Chemistry Program to adequately support the plant. An ongoing action item system has been established between the plant and Technical Functions to track those items where further improvement is still desirable and any new emergent items.	III.	T. F./ TMI-1	A	Complete *

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
Finding III-E:	The number of different engineering groups at the site is contributing to loss of efficiency.				
III-E	Rec: Review number of site engineering groups and their direction with objective of reducing their number (all applicable divisions). Resp: Combination of Functional Organization and use of generic titles (Engr. I, etc.) tends to give appearance of large number of groups. Essentially all positions identified require engineering background. Review complete.	II.	O/P	A	Complete
Finding III-F:	There are too many instances where rad controls are not as good as they should be. The work force has not accepted enough of the responsibility for high quality rad work performance. Excessive generation of radioactive waste is part of these problems.				
III-F (a)	Rec: Increase efforts of manager and supervisors to achieve excellent radiological performance by their workers on every job. Resp: This item should be closed out; however, ongoing efforts and programs to achieve excellent radiological performance must continue as a normal way of conducting operations and maintenance of the plant. In 1983 the plant came in well under the person-rem goal but exceeded the personnel contamination goal. More emphasis and attention to reducing skin contaminations are being applied. Radiological goals have been established for 1984. Will continue to emphasize Rad Awareness and continue efforts with M&C.	III.	TMI-1	A	Complete * Ongoing effort
III-F (b)	Rec: Improve Rad Con management and work force management working relationships. Resp: Experience with OTSG and other work shows current organization and personnel working well together.	IV.	R&EC/ TMI-1	A	Complete
III-F (c)	Rec: Upgrade rad. technician performance by improving ability to identify and report deficiencies. Resp: Cyclic training specifically addresses recommendation; increased number of RDR's submitted by technicians indicate improvement.	III.	R&EC	A	Complete *

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
III-F (d)	Rec: Speed correction and problem solving of rad. deficiencies. Resp: Response to III-F-(c) will help on this. Efforts underway to provide T. F. assistance on recurring items requiring engineered solution.	III.	R&EC/ TMI-1	A	Complete
III-F (e)	Rec: Look to decrease number of rad. techs. as work force practices good rad. work performance. Resp: Will be addressed in setting '84 & '85 authorized levels of manpower. The number of rad. techs. has been reduced from 30 to 24. This number will be maintained for 1984.	II.	R&EC	A	Complete *
III-F (f)	Rec: Achieve recommendations III-F(a) through III-F(e) re: radiological practices without new systems and gimmicks. Resp: No new systems or gimmicks have been used. See responses to III-F(a) through III-F(e).	III.	R&EC/ TMI-1	A	Complete
<u>Finding III-G-1:</u> The warehouse inventory records have enough nomenclature inaccuracies to degrade efficiency.					
III-G-1	Rec: Program to improve nomenclature of inventory records. Resp: Physical inventory complete. Warehouse discrepancy reports being used effectively and service has improved significantly. Improvements in inventory nomenclature have been made via AMMS for items prospectively procured. Warehouse and site personnel have also made changes on a case-by-case basis. Technical Functions and Materials Management are jointly proposing establishment of a unit to assign consistent and accepted nomenclature. These efforts must be conducted in parallel with reduction of surplus inventory items which is part of ongoing Warehouse Reassessment Program scheduled for completion in August 1984.	III.	Admin./ TMI-1/ M&C	B	3rd Q 1984 M&C Division will support Materials Management in this effort to improve nomenclature of inventory records.
<u>Finding III-G-2:</u> The amount of stock at TMI is excessive.					
III-G-2	Rec: Purge TMI stock of unnecessary material. Resp: Program underway. Admin Division Goal for 1984.	III.	Admin.	B	4th Q 1984

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
<u>Finding III-G-3:</u>	The period of time from preparation of a requisition to delivery of purchased material is too long.				
III-G-3	Rec: Plant Engineering prepare generic specs. for commonly used materials and consumable stock items. Resp: Generic specs have been produced for a large number of items and are used wherever appropriate. Others are being prepared on a case-by-case basis for commonly used items as time permits. This is an ongoing program that will continue through life of the plant. Present progress is good considering other vital restart work in progress. The number of reviewers in the approval cycle contributes more to administrative delay than the availability of generic specs.	III.	TMI-1	A	Complete * Ongoing effort.
<u>Finding III-H:</u>	There is a need for the TMI Human Resources group to improve further their responsiveness to site needs.				
III-H	Rec: Review manning and effectiveness of Human Resources support of TMI-1 Resp: Effectiveness substantially improved. Manning will be addressed as part of XII-E.	II.	H. R.	A	Complete
<u>Finding III-I:</u>	A review of the number of people assigned to administration work at TMI-1 appears excessive.				
III-I	Rec: Look to reduce on-site clerical/admin. support Resp: Operations Analysis is currently studying division-by-division beginning with the Administration Division. Plans are in place to reduce the TMI Information Center by 13 temporaries by 12/83 and by 8 GPU System employees by 12/84. Operations Analysis review of non-exempt, non-bargaining secretarial support completed for TMI-1 staff in 1983.	II.	TMI-1	B	3rd Q 1984 * Complete for TMI-1 Division

BETA
FINDING/
RECOMMEND.

PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE

CAT.	DIVISION	STATUS CODE	COMMENTS
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Oyster Creek Findings & Recommendations

Finding IV-A-1: The role of the Director, Oyster Creek needs to be clarified and strengthened with respect to the overall site operation.

IV-A-1 (a)	<p>Rec: Office of the President foster understanding of how functional organization should operate.</p> <p>Resp: Continuing effort reflected in Corporate Objective 5. In 1983, Corporate Goal 9 & Management Training Program respond directly.</p>	I.	O/P	A	Complete *	
IV-A-1 (b)	<p>Rec: Continue emphasis on support role of non-plant divisions.</p> <p>Resp: Continuing effort reflected in Corporate Objective 5.</p> <ul style="list-style-type: none"> * Added specific wording to Plant Division Functions * Strengthened Plant Division role in Budget Process 	I.	O/P	A	Complete *	
IV-A-1 (c)	<p>Rec: Emphasize elimination of jurisdictional disputes.</p> <p>Resp: Covered in Corporate & Divisional Staff Meetings & during Inter-divisional work progress/status meetings. Substantial improvement achieved.</p>	I.	O/P	A	Complete	
IV-A-1 (d)	<p>Rec: Encourage support for and working within new organization.</p> <p>Resp: OC Div. Staff meetings include Support Divisions and this issue is addressed directly and indirectly. Experience during OC outage will rapidly mature organization.</p>	I.	O. C.	A	Complete *	
IV-A-1 (e)	<p>Rec: Encourage freer discussion among divisions.</p> <p>Resp: 1983 Corporate Goal 9 directly addresses issue.</p>	I.	O/P	A	Complete *	
IV-A-1 (f)	<p>Rec: Encourage upward not downward corporate policy complaints.</p> <p>Resp: Continuing effort reflected in Corporate Objective 5. 1983 Corporate Goal 9 and management program respond directly.</p>	III.	O/P	A	Complete *	

Finding IV-A-2: The functions now performed by Plans and Programs could be accomplished more efficiently.

IV-A-2 (a)	<p>Rec: Hold section to current size (Plans & Programs).</p> <p>Resp: Size has been held.</p>	II.	O. C.	A	Complete	
IV-A-2 (b)	<p>Rec: Use OC Plans and Programs section as service not line authority organization - coordinator</p> <p>Resp: Role has been clarified - Ref: PRC memo of 2/11/83.</p>	I.	O. C.	A	Complete	

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
<u>Finding IV-B:</u>	There is a lack of involvement by Operations in Oyster Creek operator training.				
IV-B	Rec: Ensure Operations involvement in Oyster Creek training programs. Resp: Steps to increase Operations Department involvement in operator training have been taken. OC Objectives 7 and 10.	V.	O.C.	A	Complete
<u>Finding IV-C:</u>	Workers do not pick up after themselves.				
IV-C	Rec: Management to emphasize worker tidiness in job performance. Resp: Oyster Creek Objective 4. Still a problem, especially with contractors. M&C Management has emphasized worker tidiness in job performance. This is an ongoing process. Periodic checks are being performed by supervisory personnel on both on- and off-shift tours. Progress made in 1983 despite outage.	III.	M&C/ O.C.	A	Complete * Ongoing effort
<u>Finding IV-D-1:</u>	The ability to perform maintenance on the plant in order to assure a reasonable degree of reliability needs substantial improvement.				
IV-D-1 (a)	Rec: Senior M&C personnel increase involvement in organizational and divisional interface problems. Resp: Being addressed by M&C Div. participation in OC outage meetings and M&C Div. meetings with M&C management at O.C. down through area supervisors. M&C is routinely represented at Site Director meetings. M&C is complying with this recommendation.	I.	M&C	A	Complete * Ongoing effort.
IV-D-1 (b)	Rec: Other site management must increase involvement in resolving interface problems resulting from maintenance realignment. Resp: Efforts by Division Directors including Staff meetings. Outage coordination, etc., have substantially reduced interface problems.	I.	M&C/O.C./ R&EC/N.A.	A	Complete
IV-D-1 (c)	Rec: Ensure familiarity and practice of new maintenance procedures. Resp: Oyster Creek Objective 5. Experience to date satisfactory. M&C Division is complying on an ongoing basis; incorporated as part of the required training.	III.	M&C/ O.C.	A	Complete * Ongoing effort.

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
<u>Finding IV-D-2:</u>	The sanctity of coffee breaks at Oyster Creek is a sizeable contributor to poor productivity.				
IV-D-2 (a)	Rec: Negotiate morning coffee break out of union agreement. Resp: Part of the Labor/Management Agreement; would be very complex to change and the conclusion is to not attempt the change.	IV.	H. R./ O. C.	E	Disagree
IV-D-2 (b)	Rec: Eliminate p.m. break or allow management to determine timing. Resp: Management has ability to set whether break is allowed and if so, the timing. Management rights identified to all managers and supervisors by JCP&L in training programs. Plan is to address this through supervisory training after negotiations are concluded.	IV.	H. R./ O. C.	C	2nd Q 1984
<u>Finding IV-D-3:</u>	Mechanics under contract through M&C do not stay on the job until the end of normal working hours.				
IV-D-3	Rec: Keep M&C contractor employees on job until end of working hours. Resp: Contractor shift schedules have been formalized and received by Site Director. Contractor work hours in accordance with contract.	IV.	M&C/ O.C.	A	Complete
<u>Finding IV-D-4:</u>	Only a fraction of the preventive maintenance routines planned for accomplishment are completed.				
IV-D-4 (a)	Rec: Expedite loading preventive maintenance system schedule in GMS. Resp: Oyster Creek Material Department Goal for '83 (OC 32) FMS schedule has been loaded into a program.	III.	O. C.	A	Complete *
IV-D-4 (b)	Rec: Learn from TMI-1 preventive maintenance program. Resp: Direct P.M. liaison established and functioning.	III.	O. C.	A	Complete
IV-D-4 (c)	Rec: Consider reducing Preventive Maintenance Manager's staff when program stabilizes. Resp: Will address in '85 budget based on first half '84 experience.	II.	O. C.	D	3rd Q 1984

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
<u>Finding IV-D-5:</u>	Mobile maintenance is a costly way to perform plant maintenance.				
IV-D-5 (a&b)	<p>Rec: Consider negotiating agreements with better utilization of Mobile Maintenance. Consider making Mobile Maintenance employees who perform most of their work at Oyster Creek part of M&C Division.</p> <p>Resp: M&C Division is taking steps to reduce the number of Mobile Maintenance personnel located at the site. In progress through attrition. Target completion 4Q 1984.</p>	IV.	M&C	B	4th Q 1984
<u>Finding IV-E:</u>	Problems in performance of the chemistry control program at Oyster Creek were found to be similar to the problems at TMI-1.				
IV-E	<p>Rec: Continue upgrade of chem. program - designate key manager, standardize analytical procedures.</p> <p>Resp: Progress is being made consistent with recommendation. Chemistry function has been transferred from Engineering to Operations and the Chemistry Manager is providing the required leadership. Completion of Oyster Creek 1983 Objective 10 and related Operations Department Objectives 21 to 25 will complete response. Continued chemistry program upgrade results are highly satisfactory. NRC/QA audits have resulted in no findings. Procedure rewrite is complete. New QA/QC procedure has been written, new instrumentation installed, daily review of all chemistry results, and current cognizance of chemistry of miscellaneous systems ongoing.</p>	III.	T. F./ O. C.	A	Complete * Ongoing effort.
<u>Finding IV-F-1:</u>	There are too many separate section level groups having engineers at Oyster Creek.				
IV-F-1	<p>Rec: Provide lead site representative for each Division for nontechnical items.</p> <p>Resp: Improved understanding of roles and Divisional internal guidance has largely achieved result. No further specific action planned.</p>	II.	O/P O. C./ TMI-1	A	Complete *
<u>Finding IV-F-2:</u>	The projected manpower level is high for the Oyster Creek Nuclear and Core Management group.				
IV-F-2 (a)	<p>Rec: Develop operating procedures to reduce dependence on Core Management Group (Nuclear and Core Management).</p> <p>Resp: Implementation of Power Shape Monitoring System (PSMS) will reduce dependence on Core Engineering. O.C. Plant Engineering Department Objective 46. PSMS implemented. No effect on manpower yet.</p>	III.	O. C.	A	Complete *

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
IV-F-2 (b)	<p>Rec: Assure no duplicate efforts with TF Nuclear Analysis and Fuels section (O.C. Nuclear & Core Management)</p> <p>Resp: Review shows no overlap. Improved coordination has developed.</p>	I.	T. F./ O. C.	A	Complete
IV-F-2 (c)	<p>Rec: Re-evaluate and look to reduce staffing level of Core Management Group.</p> <p>Resp: Evaluation of requirements indicated a staffing of six engineers and a manager/supervisor is required. Reduction of one engineer from Plant Engineering planned for 1984, not specifically from Core Group.</p>	II.	O. C.	E	Disagree
<p><u>Finding IV-G:</u> There are too many instances where rad. controls are not as good as they should be. The work force has not accepted enough of the responsibility for high quality rad work performance. Excessive generation of radioactive waste is part of these problems.</p>					
IV-G (a)	<p>Rec: Increase management efforts to obtain excellent radiological performance by their workers routinely on jobs.</p> <p>Resp: This is an ongoing effort which is supported by Oyster Creek, M&C and R&EC senior people. The Radiological Assessment program, plant tours by management and Radiological Deficiency Programs are being used to monitor progress on this effort. Has been incorporated into the M&C 5-Year Plan and a man rem reduction program is included as a 1984 M&C Division Goal. Pre-job briefings have been formalized. The briefings are conducted by craft supervision who emphasize the need for good radiological practices. Improved Rad Awareness Committee is in place.</p>	III.	R&EC/ O.C./M&C	A	Complete * Ongoing effort.
IV-G (b)	<p>Rec: Improve Rad Con management and work force management working relationships.</p> <p>Resp: Preparation for and initial work during outage have resulted in substantial improvements in working relationships. A Radiation Awareness Committee has been formed and has held routine meetings since 5/20/83. See responses to IV-G(a) and (c). Programs are in place to improve the working relationships; however, additional effort is needed.</p>	I.	R&EC O.C./M&C	B	2nd Q 1984

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE		CAT.	DIVISION	STATUS CODE	COMMENTS
IV-G (c)	Rec: Use radiological awareness committee similar to that at TMI-1 to help in accomplishing recommendations IV-G-(a) and (b). Resp: An O.C. Radiological Awareness Committee was established and has functioned since 5/20/83.		III.	O.C./M&C/ RE&C	A	Complete
IV-G (d)	Rec: Upgrade performance of rad. con. techs. by improving rad. deficiency identification and reporting. Resp: Efforts continue via cyclic and seminar training; improvements have been as indicated by fewer findings of posting and labeling deficiencies by O. C. Rad Assessor. Effective implementation to continue.		III.	R&EC	A	Complete
IV-G (e)	Rec: Accelerate correction of rad. deficiencies and increase attention to problem solving. Resp: The response to Recommendations IV-G-(a), (c) and (d) will help on this issue as well. Also, efforts are underway to get assistance from Technical Functions on recurring problems that require engineered solutions. Backlog of open rad. deficiencies has been significantly reduced and emphasis placed on this area by formation of the Rad Improvement Committee in 8/83.		III.	R&EC/T.F. O.C/M&C/	A	Complete
IV-G (f)	Rec: Look to decrease number of rad. techs. as work force practices good rad. work performance. Resp: Will be addressed in setting '84 & '85 authorized levels of manpower. Will reduce number of Company rad. techs as work practices improve.		II.	R&EC	B	3rd Q 1984 Complete for 1984 levels.
IV-G (g)	Rec: Commence rad technician training to handle unusual situations not covered by written procedures (Rad. Con.) Resp: Emergency drills and seminars initiated and being held on a recurring basis. Each session is documented.		V.	R&EC/ O. C.	A	Complete
IV-G (h)	Rec: Utilize existing management systems to achieve improvement in radiological practices. Resp: All related recommendations are being carried out using the present management systems.		III.	R&EC/ O.C./M&C	A	Complete

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
<u>Finding IV-H:</u>	Senior management people at Oyster Creek are spending too much time on PORC matters.				
IV-H	Rec: Review Tech. Specs to determine if present wording requires PORC to review documents beyond a scope considered appropriate. No rewrites by PORC of poorly written procedures. Resp: Tech Spec Change Request has been submitted to and issued by NRC which will meet this recommendation. Equivalent issue under new review procedure will be addressed during implementation of new administrative procedures.	III.	O. C.	B	2nd Q 1984 Expect implementation early 1984.
<u>Finding IV-I:</u>	The number of people assigned to administrative work at Oyster Creek appears excessive.				
IV-I	Rec: Reduce on-site clerical and administrative positions. (All divisions.) Office of the President set arbitrary number. Resp: Is being addressed in overall manning; Operations Analysis will study 1Q'84.	II.	O/P	D	1st Q 1984
<u>Finding IV-J-1:</u>	The purchasing operation at Oyster Creek is receiving inadequate clerical support.				
IV-J-1	Rec: Consider reassigning under-utilized clerical personnel to Purchasing to support processing of requisitions. Resp: Additional personnel assigned to purchasing. Routine requisitions sent to Parsippany to handle. Aspect of recommendation pertaining to under-utilized personnel will be covered in response to IV-I.	II.	O. C.	A	Complete
<u>Finding IV-J-2:</u>	The stores and warehouse function at Oyster Creek can improve its support of the plant.				
IV-J-2 (a)	Rec: Expedite installation of CRT's in plant to give direct access to inventory records. Resp: CRT's at site can be used to gain access to Inventory Control System.	III.	O. C.	A	Complete

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
IV-J-2 (b)	<p>Rec: Carefully plan disposal of on-hand direct turnover material not required for plant support.</p> <p>Resp: Substantial progress in improving support to site operations by the warehouse has occurred under the Warehouse Reassessment Program implemented in 9/83. Surplus DTQ materials have been identified to the user community for 1) addition to inventory; 2) use on ongoing outage projects; and 3) for disposal. The latter effort is being hampered by the lack of sufficient engineering support to review candidate items for disposal; issue has been elevated to senior management for resolution. Review for status 6/84.</p>	III.	Admin./ O. C.	B	Review for status 2Q 1984
IV-J-2 (c)	<p>Rec: Consider staging of material on a job basis.</p> <p>Resp: Review conducted. Proceeding to "stage" in data base, tag stock material for specific jobs and stage major jobs for outage.</p>	III.	M&C/O.C./ Admin.	A	Complete
<u>Finding IV-J-3:</u> Delays in processing invoices for payment are creating significant problems for Purchasing.					
IV-J-3	<p>Rec: Backlog in A/P should be promptly eliminated.</p> <p>Resp: Substantial progress made. Backlog has been significantly reduced to manageable levels. Monthly trending is in place.</p>	III.	O. C.	A	Complete

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
<u>Nuclear Assurance Findings and Recommendations</u>					
<u>Finding V-A:</u>	The group presently assigned to Nuclear Assurance located at Reading should be eliminated and the functions Reassigned to Parsippany.				
V-A	Rec: Reassign budgeting and administrative functions from Reading to Parsippany. Resp: D. Hetrick no longer with GPUN: Function assigned in Parsippany under R. Hedges.	I.	N. A.	A	Complete
<u>Finding V-B-1:</u>	There are many training and development courses offered which are useful but not essential.				
V-B-1	Rec: Review Management Development courses and eliminate those which do not materially contribute to safe and efficient operation of the plants. Resp: Extensive review of all management development programs have been made and present selection of programs is considered to contribute to the up-grade of managerial skills.	V.	N. A.	A	Complete
<u>Finding V-B-2:</u>	The headquarters training group is not concentrating enough on coordinating plant training efforts.				
V-B-2	Rec: Coordinate and oversee efforts of the two site training groups. Resp: New Director, T&E is coordinating plant training efforts, establishing Departmental Policies and Procedures and modifying present corporate training structure.	V.	N. A.	A	Complete
<u>Finding V-B-3:</u>	There are inefficiencies in the TMI training effort due to a lack of meaningful scheduling. The Training Department has difficulty in obtaining data to schedule its training.				
V-B-3	Rec: Develop realistic training schedules on an annual basis. Resp: The 1983 schedule for all supervisory and management development has been generated. New initial training programs in operator and other technical areas have been scheduled. Efforts to expand master schedule and resolve scheduling problems will continue on an on-going basis. Finding should be closed by March 1984.	V.	N. A.	B	1st Q 1984
<u>Finding V-B-4:</u>	There is an overly "understanding" attitude which prevails in the TMI Training Department, especially with respect to operator training.				
V-B-4 (a)	Rec: Minimize use of outside personnel to review training program, utilize in-house personnel instead. Resp: Will follow except for ASLB mandated audit and INPO.	V.	N. A.	A	Complete

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE		CAT.	DIVISION	STATUS CODE	COMMENTS
V-B-4 (b)	Rec:	Concentrate on providing best training program, not proving it.	V.	N. A.	A	Complete
	Resp:	Efforts to improve program contents, instructor capabilities and delivery systems continue. T&E has developed and adopted TSD (Training Systems Development process). Training Advisory Committee is being formed.				
V-B-4 (c)	Rec:	Make students more responsible for their own performance in training.	V.	N. A. / All Div.	B	2nd Q 1984
	Resp:	Each training site has generated documents of student responsibilities when in training. Documents are being discussed for agreement with user departments. TMI-1 Plant Staff has loaned one SRO and two ROs to Training to assist in Simulator Training & Development. Three ROs to take SRO exam in March. Licensing of these three SROs will permit the Plant to provide Training Department with some SRO licensed operators on a permanent basis. The Plant Staff is also coordinating the effort to prepare and issue the Operations Plant Manual which will be used as the basis for operator training. Five of nine volumes have been issued but still have material to be added. Estimate that this manual will be 95% complete by 7/1/84.				* M&C is making diligent effort to enforce better participation and discipline of its employees during company training programs
Finding V-B-5: There exists a lack of supervision of instructors in the TMI Training Department.						
V-B-5 (a)	Rec:	Review supervisory responsibilities with those assigned as supervisors of training instructors.	V.	N. A.	A	Complete
	Resp:	T&E Supervisors attend appropriate supervisory and management development courses. The formal instructor evaluation programs assure that supervisors observe their own instructors as well as those from other sections at the Training Dept.				
V-B-5 (b)	Rec:	Manager, TMI Training, improve accessibility to staff by relocating office.	III.	N. A.	E	Disagree
	Resp:	Office is in Training Building. Accessibility has been emphasized. Relocation not needed.				

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
V-B-5 (c)	<p>Rec: Assign responsibility for monitoring activities in Training Building in the absence of Manager, TMI Training and Operator Training Manager.</p> <p>Resp: Individual supervisors and lead instructors are always held responsible for monitoring the activities of persons reporting to them. During sustained periods of absences (e.g. vacation, simulator training), an acting manager or supervisor is designated by memorandum.</p>	V.	N. A.	A	Complete
<u>Finding V-B-6:</u>	Findings reported on TMI-1 Training have applicability at Oyster Creek.				
V-B-6 (a)	<p>Rec: Apply recommendations for TMI Training to training program at Oyster Creek.</p> <p>Resp: Headquarters and Oyster Creek Training Departments have reviewed BETA TMI training recommendations. The responses in this report are applicable to all three training locations.</p>	V.	N. A.	A	Complete
V-B-6 (b)	<p>Rec: Headquarters Training mandate the coordination of training programs at TMI and Oyster Creek.</p> <p>Resp: T&E Department Policies and Procedures have been developed and are being implemented as official document for coordination of site training programs.</p>	V.	N. A.	A	Complete
<u>Finding V-C-1:</u>	There are more QA engineers than necessary to carry out the requirements contained in the GPUN Operational Quality Assurance Plan.				
V-C-1	<p>Rec: Reduce the number of engineers assigned to QA Engineering as Technical Functions, Plant Engineering, and M&C mature.</p> <p>Resp: The number of engineers assigned to QA has been reviewed in the Budget Process for 1984 and will again be reviewed in 1985. On the basis of where we are today (TMI-1 is still waiting restart, TMI-2 is still in a recovery mode and Oyster Creek is in a prolonged outage), it is anticipated that the number of engineers assigned to QA Engineering will remain the same. Activities indicated by the production indices have increased. QA Engineering has looked at and continues to look at new means for becoming more efficient.</p>	II.	N. A.	A	Complete

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
<u>Finding V-C-2:</u>	There are too many people assigned to Operations QA for the expected decline in the future work load.				
V-C-2	<p>Rec: Reduce number of QA monitors through attrition as work force stabilizes and matures.</p> <p>Resp: During the 1984 Budget Review Process, the number of people assigned to Operations QA at both TMI and Oyster Creek was evaluated. Special management initiatives directed at TMI-1 resulted in an increase of six QA shift engineering monitors for Unit 1. No changes were made for Unit 2 or O.C. since no reduction in work load or production indices was projected for 1984.</p>	II.	N. A.	A	Complete
<u>Finding V-C-3:</u>	The Manufacturing Assurance section is larger than is required for known future work.				
V-C-3	<p>Rec: Reduce size of Manufacturing Assurance section as manufacturing effort associated with large modifications decreases.</p> <p>Resp: The number of QA representatives in the Manufacturing Assurance Section was reviewed during the 1984 Budget process. As a result of efficiencies established by that section, the number of contractor hours required to support the program has been significantly reduced but the number of QA representatives will remain the same. This will again be reviewed in 1985 budget process.</p>	II.	N. A.	A	Complete
<u>Finding V-C-4:</u>	There is a risk associated with the new Operational QA Plan.				
V-C-4	<p>Rec: The QA Director remain actively involved during the implementation of the new Operational QA Plan.</p> <p>Resp: QA Director has remained involved. Implementation complete.</p>	III.	N. A.	A	Complete
<u>Finding V-C-5:</u>	The TMI-1 QA Department creates the illusion in the minds of others that the Department is not supporting the plants.				
V-C-5 (a)	<p>Rec: The Director, Quality Assurance, take necessary positive steps to improve perception of the QA Department among senior management.</p> <p>Resp: Director, QA has specifically addressed this with his staff - significant improvement noted.</p>	III.	N. A.	A	Complete
V-C-5 (b)	<p>Rec: Division Vice Presidents encourage staff personnel to support and assist in the execution of the Corporation's Operational Quality Assurance Plan.</p> <p>Resp: Support has been made clear by all Directors to their staff. Results evident.</p>	III.	O/P	A	Complete

BETA FINDING/ RECOMMEND.		PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
<u>Technical Functions Findings & Recommendations</u>						
Finding VI-A: The overall effectiveness of Technical Functions in supporting VMI-1 and Oyster Creek is lacking.						
VI-A (a)	Rec:	Maintain present manning levels within Tech Functions.	II.	T. F.	A	Complete
	Resp:	Authorized level for 1983 was same as 1982. 1984 will be slightly lower.				
VI-A (b)	Rec:	Review methods to improve the management of the large engineering group within TF.	III.	T. F.	B	4th Q 1984
	Resp:	Since the BETA review over a year ago, Technical Functions has made significant improvements which facilitate the management of engineering work. These include the issuance of detailed schedules for significant engineering projects, computerized "work-in-progress" status and look ahead reports, etc. In addition, most management positions have been filled and required procedures have been issued. As the organization has matured, the procedures have been revised to reflect improvements.				
		From time to time, the Technical Functions staff meets to discuss problems (and solutions) which tend to detract from the efficient management of its activities. During such discussions, we have not uncovered internal problems which were not resolvable within the present organizational structure and procedural system. We view this mechanism as an ongoing process required of all organizations to permit them to detect and respond to current or impending problems. There continues to be problems of a corporate kind which impact the efficient operation of a central engineering group. Suggestions have been made to Office of the President for resolution.				
VI-A (c)	Rec:	Evaluate and procure outside assistance to train TF Management in supervising a large engineering group.	III.	T. F.	D	1st Q 1984
	Resp:	During the first quarter, 1983, Technical Functions arranged for Sterling Institute to present a 35 hour course entitled "Technical Management" to approximately 50 managers/senior engineers. This course was designed around GPUN organizational responsibilities and Technical Functions' procedural system. The program was only moderately successful. We have recently requested the Training Department to interview key Technical Functions directors/managers to determine if there still exists perceived deficiencies which are resolvable by perhaps another training firm. Our plan of action will be finalized during the first quarter of 1984.				

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
<u>Finding VI-B-1:</u>	It is too hard and takes too long to get a Technical Functions procedure changed.				
VI-B-1	Rec: Respond to requests for changes to Engineering Procedures and Standards promptly. Resp: Initial issue of interface procedures complete. Timeliness improved and now adequate.	III.	T. F.	A	Complete
<u>Finding VI-B-2:</u>	The Engineering Cost Analysis section is not analyzing costs.				
VI-B-2	Rec: Redirect the efforts of the Cost Analysis section away from cost reporting and toward cost estimating and analysis (the section's purpose). Resp: Cost estimating and analysis capability being developed. Initial action complete with assignment of Fiscal & Info Management person to T. F. to provide cost reporting.	III.	T. F.	A	Complete
<u>Finding VI-B-3:</u>	Drawings have not been revised to show completion of modification work.				
VI-B-3	Rec: Revise drawings in D&D deemed necessary for operational and maintenance purposes when Design Correction Notices are received so that drawings are current as regards modifications so no applicable DCN will be more than 6 months old. Resp: Engrg. Procedure EP-025 issued and describes policy on updating. Being followed by Tech Functions. Backlog is being reduced.	III.	T. F.	A	Complete
<u>Finding VI-B-4:</u>	Rework, as measured by the number of Field Change Notices, is excessive.				
VI-B-4	Rec: Conduct design reviews before work is started to decrease need for Field Change Notices during construction, operation, or maintenance. Resp: Procedures now require design reviews. This has been implemented since Fall '82.	III.	T. F.	A	Complete
<u>Finding VI-C:</u>	There are too many people assigned to the Director, Licensing & Regulatory Affairs.				
VI-C (a-1)	Rec: Effect reductions in the number of people assigned to L&RA. Resp: Is being addressed in '84 & '85 budgets as appropriate.	II.	T. F.	A	Complete

BETA FINDING/ RECOMMEND.		PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
VI-C (a-2)	Rec:	Redefine the role of Licensing and Regulatory Affairs (L&RA) to ensure that it acts as an interface between GPUNC and regulatory bodies.	I.	T. F.	A	Complete
	Resp:	Role is defined adequately as interface: Recognition by other substantially improved.				
Finding VI-D:		There is a lack of intimate day-to-day knowledge of the problems being found at the plants that require engineering support or involvement.				
VI-D	Rec:	Investigate means for having plant information and problems flow into the Engineering and Design organization on a routine basis, not just when TF support is required.	III.	T. F.	A	Complete
	Resp:	Specific systems and components have been assigned to off-site engineering groups to increase day-by-day involvement. Also, most on-site Technical Functions engineering groups, such as Startup & Test and STA's, are almost fully staffed and intimate knowledge of plant problems has become a reality.				
Finding VI-E-1:		The Shift Technical Advisor (STA) program at both sites, but particularly at Oyster Creek, needs to be reviewed and strengthened.				
VI-E-1 (a)	Rec:	In the process of developing the Shift Technical Advisor (STA) training program, place a greater emphasis on providing the trainee with a firm technical foundation and less on making him a qualified operator.	V.	T. F.	A	Complete
	Resp:	STA program has been revised to provide technical emphasis in addition to operating information.				
VI-E-1 (b)	Rec:	Consider eliminating the requirement that STA's obtain an SRO license.	I.	T. F.	A	Complete
	Resp:	Have completed evaluation. License requirement will be continued.				
VI-E-1 (c)	Rec:	Ensure that sufficient STA's are in the training program to compensate for attrition and to satisfy promised rotation at the same time.	V.	T. F.	A	Complete
	Resp:	TMI and O.C. have adequate numbers.				

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
VI-E-1 (d)	<p>Rec: Review responsibilities of the STA's during normal and abnormal situations with the STA's and with shift supervisors.</p> <p>Resp: Responsibilities are defined. Procedure ES-005 revised to clarify responsibilities of STAs and have been reviewed with shift supervisors and foremen at TMI-1. Technical Functions will participate in discussions with operations personnel if requested by TMI-1 and Oyster Creek.</p>	V.	T.F./ O.C./ TMI-1	A	Complete *
<u>Finding VI-E-2:</u> The need for a Systems Analysis Director is questionable.					
VI-E-2	<p>Rec: Eliminate positio. of Systems Analysis Director.</p> <p>Resp: Action already taken on this item at the time of BETA report.</p>	II.	T. F.	A	Complete
<u>Finding VI-E-3:</u> There is a lack of involvement by Technical Functions in the conduct of the Training Program, particularly operator training.					
VI-E-3	<p>Rec: Provide technical guidance to training programs, especially operator training.</p> <p>Resp: Technical Functions Procedure EP-015 developed and now being implemented for both Oyster Creek and TMI-1. Technical Functions is actively reviewing training material for technical content.</p>	V.	T. F.	A	Complete *
<u>Finding VI-E-4:</u> GPUN's goal to achieve an in-house licensed nuclear design capability may not provide the anticipated advantages.					
VI-E-4	<p>Rec: Do not develop an in-house licensed nuclear design capability unless GPUNC is willing to restrict fuel selections to proven technology and not attempt to incorporate advantages in performance until they have been thoroughly tested at other plants.</p> <p>Resp: Technical Functions disagrees with this recommendation. Our plans to develop in-house reload capability have been forwarded to the Office of the President for concurrence and authorization of additional personnel.</p>	III.	T. F.	E	Disagree

BETA FINDING/ RECOMMEND	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
<u>Finding VI-F-1:</u>	Engineering Projects personnel are performing tasks that could be better done elsewhere in the Division, thus decreasing their capacity for the management of engineering projects.				
VI-F-1	Rec: Evaluate functions currently performed in Engineering Projects and reassign those that detract from project management capability. Resp: This had been underway. Situation resulted from JCP&L combined engineering for O.C. Reassignments complete.	III.	T. F.	A	Complete
<u>Finding VI-F-2:</u>	The training of project engineers is weak.				
VI-F-2	Rec: Provide training to Project Engineers in GPUNC organizational structure, methods, and policies. Resp: Training program conducted late '82, early '83.	V.	T. F.	A	Complete
<u>Finding VI-F-3:</u>	Project engineers do not receive adequate information concerning the progress, cost and trends in progress and cost for the budget activities for which they were the originating source of authority for the modification or the major O&M project.				
VI-F-3	Rec: Devise reports that will permit having a running knowledge of cost and performance. Resp: Improved reports in place. Efforts will continue into '84.	III.	Admin./ O/P	B	1st Q 1984
<u>Finding VI-G:</u>	A separate group at the Director level for Startup and Test is questionable.				
VI-G	Rec: Consider reassigning the Headquarters Start-Up and Test group into the Systems Engineering group. Assign site personnel in this group to Plant Engineering. Resp: Has been considered. No change to be made at this time. Believe SU&T should be within Tech. Functions, not Plant Engineering. Work load for next year is high and critical. Any possible gain by reassignment within Tech Functions would be offset now by disruption due to change.	I.	T. F.	A	Complete
<u>Finding VI-H:</u>	Neither the chemistry group in Technical Functions nor the System Laboratory has assumed a leadership role in the TMI-1 or Oyster Creek Chemistry improvement programs.				
VI-H (a-1)	Rec: Remove System Laboratory from GPUN after the Chemistry Programs at TMI-1 and Oyster Creek have been improved. Resp: Disagree. Management of activity to benefit both nuclear and fossil activities best served by present location.	I.	T. F.	E	Disagree
VI-H (a-2)	Rec: Provide T.F./System Laboratory leadership to plant Chemistry improvement. Resp: Nev. TF Chemistry Director has been directed to get actively involved in improving the site chemistry programs. This has been implemented effectively.	I.	T. F.	A	Complete

BETA
FINDING/
RECOMMEND.

PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE

CAT.	DIVISION	STATUS CODE	COMMENTS
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Administration Findings & Recommendations

Finding VII-A: The Administration Division needs to improve its ability to provide a service function and to lessen the perception that it is a control function.

VII-A (a)	<p>Rec: Continue to redirect efforts to provide an effective service to other divisions.</p> <p>Resp: Admin. Division Goal 3 for 1983. Concerted effort has been devoted to provide responsive support to other divisions. Warehouse deliveries to the TMI protected area and extraordinary procurement support to the Oyster Creek outage are two illustrations of this commitment. Special rate case support, budget administrators, operations analysts, Information Center Services, policy and procedure consultants are all in place providing high quality services to the divisions. Many memos of commendations by those served support conclusion of satisfactory service perception by all divisions.</p>	I.	Admin.	A	Complete *
VII-A (b)	<p>Rec: Change impression that Administration Division determines how corporate policy is to be carried out in administrative matters.</p> <p>Resp: Direction provided by O/P & Director, Admin. Div. through such items as Admin. Div. Goal 3.</p>	I.	Admin./ J/P	A	Complete
VII-A (c)	<p>Rec: Adopt the motto "We serve the plants."</p> <p>Resp: Effectively adopted by Admin. Goal 3.</p>	I.	Admin.	A	Complete

Finding VII-B: The Manager of Management Services has a narrow scope of work assigned.

VII-B	<p>Rec: Increase scope of work assigned to senior manager (Manager of Management Services) or delete the position.</p> <p>Resp: Organization restructured.</p>	IV.	Admin.	A	Complete
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Finding VII-C: The efforts of the Operations Analysis group within Administration are not effectively channeled.

VII-C	<p>Rec: Efforts of Operations Analysis group should be directed by the Office of the President.</p> <p>Resp: O/P met with Ops. Analysis management to define role and priorities. This will continue.</p>	I.	O/P	A	Complete
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BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
<u>Finding VII-D:</u>	The cost reductions possible with more sophisticated contracting methods are not being achieved.				
VII-D (a)	<p>Rec: Continue training requisitioners of materials and services and develop a means to measure success of training.</p> <p>Resp: Requisitioner Training Course being revised to tailor to specific GPUN Div. needs presented in a "seminar" type 2 hour approach; will better insure avail. of key requisition activity managers and permit discussion of practical problems, causes and solutions vs. highly theoretical nature of initial training course. M&C and Rad Con Seminar scheduled for 2nd Q 1984; N.A., O.C. and TMI-1 scheduled for 3rd Q 1984.</p>	V.	Admin.	B	2nd Q 1984 (M&C, R&EC) 3rd Q 1984 (NA, OC, TMI-1)
VII-D (b)	<p>Rec: Greater emphasis on Cost Plus Incentive Fee-type contracts.</p> <p>Resp: Emphasis has been applied. Results tracked monthly.</p>	III.	Admin.	A	Complete
VII-D (c)	<p>Rec: Monthly reports from major contractors identifying work progress by task and actual costs. Quarterly reports from major contractors forecasting work progress and expenditures.</p> <p>Resp: Procedures for accruing costs and earned value reporting being developed and implemented. Formal procedures in place; newly placed contracts now will incorporate required feature. Responses will take several months to effect the end-to-end technique.</p>	III.	Admin.	A	Complete *
<u>Finding VII-E:</u>	There needs to be overall improvement in the Security Division in order to improve its efficiency.				
VII-E	<p>Rec: There needs to be an overall improvement in the Security Division in order to improve its efficiency. (See VII-E-1 through VII-E-10).</p> <p>Resp: BETA made 14 recommendations relating to Security. Three were rejected, eight implemented and three (of which this is one) are still open. Since the two other items are now complete or have a target date, this item is closed.</p>	III.	Admin.	A	Complete *

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
<u>Finding VII-E-1:</u>	Some security administrative functions at TMI-1 and TMI-2 can be combined to save manpower.				
VII-E-1	<p>Rec: TMI-1 access control clerk handle TMI-2 workload reducing staff by 1 control clerk. Additional savings would be achieved by TMI-1's clerk typist supporting TMI-2.</p> <p>Resp: The TMI-1 Security staff has been reduced by one Administrative Clerk "A". It is not feasible to have TMI-2 clerk typist workload transferred to TMI-1.</p>	II.	Admin.	A	Complete *
<u>Finding VII-E-2:</u>	The Response Force capability at TMI-1 and TMI-2 can be considered to be 10 armed guards (each plant will support the other). Because outside support is readily available, a smaller Response Force would meet NRC requirements.				
VII-E-2	<p>Rec: Combine response force capability at TMI to reduce response force total. Negotiate with NRC to reduce force to six to eight guards.</p> <p>Resp: Disagree - Separation committed to in Restart hearings and potential for demonstrations make further reductions impractical. We recommend this issue be reconsidered after TMI-1 is on line as the agreement with the NRC involves separation of Units 1 and 2.</p>	II.	Admin.	E	Disagree
<u>Finding VII-E-3:</u>	Inadequate engineering and construction support for the TMI-1 and TMI-2 security operations is resulting in the need to substitute guards for security hardware. Such substitutions are expensive.				
VII-E-3 (a)	<p>Rec: Provide adequate engineering and construction support for security operations.</p> <p>Resp: Technical Functions has assigned a Project Engineer to coordinate major Security improvements at TMI & O.C. (upgrading of Perim Alert perimeter barrier/detection system). M&C has established a preventive/corrective maintenance program at Oyster Creek for Security search and assess control equipment and hardware. Technical Functions, Computer Support is coordinating efforts to correct Security computer deficiencies at O.C. and TMI. In view of progress, recommend classifying as complete.</p>	III.	Admin.	A	Complete *

NETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
VII-E-3 (b)	<p>Rec: Develop procedures to require periodic review of security systems where minor degradations are compensate for by stationing guards to meet NRC commitments</p> <p>Resp: The Manager-Security issued a directive requiring a monthly report documenting the review, the degradations and compensatory measure costs, date of corrective action and any recommendations to minimize chances of a reoccurrence.</p>	III.	Admin.	A	Complete *
VII-E-3 (c)	<p>Rec: Activate alarms at fuel handling bay doors 73 and 74 and reduce guard force at TMI-1.</p> <p>Resp: Complete.</p>	II.	Admin.	A	Complete
VII-E-3 (d)	<p>Rec: Activate alarms at doors 11 and 16 and reduce TMI-2 guard force.</p> <p>Resp: Complete.</p>	II.	Admin.	A	Complete
<u>Finding VII-E-4:</u> The TMI-2 entrance to the protected area uses a temporary building and manual search to control entry of personnel. This facility and its operation are inefficient in the use of guard manpower.					
VII-E-4	<p>Rec: Upgrade TMI-2 Processing Center including installation of metal monitors and explosive monitors. Offset is reduction in guards at TMI-2.</p> <p>Resp: Key carded turnstiles will be installed at the Unit 2 Processing Center not later than the 2nd Q of 1984. This will result in a reduction of four man years for the Unit 2 Site Protection Officer force. The construction of a permanent Unit 2 Processing Center to include electronic search equipment was rejected for the 1984 budget due to the impending overall status change for TMI-2 that will occur when the core is removed from the reactor.</p>	II.	Admin.	B	2nd Q 1984
<u>Finding VII-E-5:</u> The protected area perimeter alarm system at TMI has an excessive number of alarms.					
VII-E-5	<p>Rec: Upgrade perimeter alarm system to produce a system with a minimum number of false alarms.</p> <p>Resp: Project is underway at TMI and O.C., coordinated by Technical Functions. This is a long term project with estimated completion 4Q '84 (TMI) and 2nd Q 1985 (OC).</p>	III.	Admin.	B	4th Q 1984 (TMI) 2nd Q 1985 (OC)

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
<u>Finding VII-E-6:</u>	Manpower requirements fluctuate as a result of training requirements, special security assignments and multi-shift operations. Extensive overtime is required to support this fluctuating workload.				
VII-E-6	<p>Rec: Determine times when security requirements peak and examine alternative shifts to reduce overall manpower and overtime.</p> <p>Resp: Site Protection personnel at TMI and O.C. are now assigned to permanent shifts. Experience to date shows that this system matches manpower available to shift manpower needs.</p>	II.	Admin.	A	Complete *
<u>Finding VII-E-7:</u>	Guard protection is being provided to areas that may not require the protection or warrant the expense.				
VII-E-7	<p>Rec: Evaluate security at TMI Training/Visitors Centers, Forked River, and TMI South Gate. Possible reduction of 8.5 to 9 man-years.</p> <p>Resp: Training center alarm installed and security coverage dropped. South gate now open only 4 hours/day, 5 days a week. Forked River has minimal coverage. Total reduction of more than 25 achieved in Security since early '82.</p>	II.	Admin.	A	Complete
<u>Finding VII-E-8:</u>	GPUN has not received adequate support from Vikonics in correcting keycard access systems deficiencies.				
VII-E-8	<p>Rec: Have an engineering evaluation made on Vikonics' equipment, including proposed corrective action and input from other utilities using equipment. Provide plan of action, including engineering and legal alternatives.</p> <p>Resp: Vikonics' equipment, following calibration by Battelle, was accepted by GPUN and is now operational. All outstanding procurement issues with Vikonics have been satisfactorily resolved.</p>	III.	Admin.	A	Complete *
<u>Finding VII-E-9:</u>	Approval has been requested to reorganize the security force to establish a Lieutenant position at each site.				
VII-E-9	<p>Rec: If lieutenant position is established in Security, the number of managers should not increase.</p> <p>Resp: Implemented with no increase.</p>	IV.	Admin.	A	Complete

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
<u>Finding VII-E-10</u> : The security operations require extensive overtime.					
VII-E-10	<p>Rec: Manpower assessments in security should include over-time usage. Recommended levels <u>including</u> overtime is Oyster Creek--62 and TMI-1--48.5.</p> <p>Resp: Site Protection personnel at TMI and OC are assigned to permanent shifts, which system experience shows meets manning needs. Staffing levels recommended for 1984 at TMI-1, TMI-2 and O.C., include a small increase in staffing to address the need for reducing overtime hours.</p>	II.	Admin.	A	Complete
<u>Finding VII-F</u> : GPUN has no employee who is a medical doctor at headquarters or TMI-1 or Oyster Creek to oversee medical aspects of the GPUN rad. health program. Part time contract physicians and a contractor are used for these functions.					
VII-F	<p>Rec: Employ a physician at TMI and assign medical radio-logical health responsibilities for TMI-1, TMI-2, and Oyster Creek.</p> <p>Resp: Board of Directors has agreed. Executive search firm actively working to recruit physician.</p>	II.	R&EC	B	2nd Q 1984

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
<u>Human Resources Findings & Recommendations</u>					
<u>Finding VIII-1:</u>	There is a need to reduce the time it takes to complete a personnel action.				
VIII-1	Rec: All levels of management understand quick action required for personnel matters. Human Resources keep track of status and identify delays. Resp: Has been re-emphasized throughout GPUNC. Response improved. H. R. tracking.	IV.	H. R.	A	Complete
<u>Finding VIII-2:</u>	The number of GPUN personnel who have the title of "Manager" or above is high in comparison to the total number of GPUN employees.				
VIII-2	Rec: Evaluate top managerial positions and determine if work matches grade level. Resp: Based on results of recorrelation and overall review of titles, response to this recommendation is complete.	V.	H. R.	A	Complete
<u>Finding VIII-3:</u>	Productivity at the nuclear plant sites is adversely affected by current bargaining unit employees.				
VIII-3	Rec: Conduct review of bargaining agreements to determine impact on work efficiency. Resp: Completed for Oyster Creek 4Q'83, TMI 1Q'84. Major emphasis has been on enforcing management rights in current agreement.	IV.	H. R.	B	Complete (OC) 1st Q 1984 (TMI)

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
<u>Radiological and Environmental Controls Findings & Recommendations</u>					
<u>Finding IX-A:</u>	Little rad. engineering is performed in Parsippany.				
IX-A	Rec: Develop small Radiological Engineering group in Parsippany. Resp: Item reviewed with Technical Functions & R&EC to develop action plan including organizational location of capability. As of 11/1/83 group will consist of a Manager and two Rad Engineers.	I.	R&EC/ OP/T.F.	A	Complete
<u>Finding IX-B:</u>	GPUN is spending more than it should in dollars and manpower for environmental monitoring at TMI-1 and Oyster Creek.				
IX-B	Rec: Begin reducing unnecessary environmental monitoring. Resp: Non-radiological Tech Spec monitoring has been reduced at TMI in 1983 after extended interaction with NRC--further reduction will only be entertained by NRC after 1988; non-rad Tech Specs at OCNCS were reduced in 1983 by elimination of redundant monitoring requirements.	III.	R&EC	A	Complete

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BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
<u>Maintenance & Construction Findings & Recommendations</u>					
Finding X-A:	The M&C Division in its effort to become established is not capitalizing on the capabilities throughout the Corporation's functional organization.				
X-A	Rec: Evaluate functions within M&C and assure no duplication of other divisions in GPUNC.	III.	M&C	A	Complete
	Resp: Review and experience at Oyster Creek with re-aligned maintenance function shows no remaining duplication.				

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
<u>Communications Findings & Recommendations</u>					
<u>Finding XI:</u>	The number of people assigned to this function appears excessive.				
XI (a)	Rec: Review anticipated workload to determine if properly manned. Resp: During the 1984 budget preparation sequence, the staffing and work load of Communications, especially the tour personnel, was reviewed.	II.	Commun.	A	Complete
XI (b)	Rec: Find useful tasks in other divisions for people when not needed for primary jobs. Resp: Some cross training complete. Was reviewed again as part of '84 budget review. See Rec XI(a).	II.	Commun.	A	Complete
XI (c)	Rec: Provide more effective supervision. Resp: Vice President, Communications has spent more time in the T&E Building where the potential problem of effective supervision is greater. Efforts continue to identify work which can be assigned to those personnel to work load them effectively during otherwise low work periods.	III.	Commun.	A	Complete

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
<u>General Findings & Recommendations</u>					
<u>Finding XII-A: Insufficient or poor supervision is contributing to poor productivity.</u>					
XII-A (a)	<p>Rec: Properly train supervisory personnel.</p> <p>Resp: Responses to other recommendations address this problem directly. Revised Supervisory Development Program now complete and being delivered at TMI and Oyster Creek. Initial efforts at Parsippany to begin in February 1984. This item remains open with 80% completion of the Supervisory Development Program expected during the 3rd Q 1985.</p>	V.	N. A. Gen./OP	B	3rd Q 1985
XII-A (b)	<p>Rec: Evaluate effectiveness of current supervisor training course.</p> <p>Resp: A special task group headed by R. Coe with O. Shalikashvili and J. Williams has reviewed this program, including feedback from past students. Recommendations for changes, as well as the addition of supplemental skill modules, will be reviewed with experienced supervisors in the various user groups. Appropriate recommendations have been incorporated into new supervisory development program. Training with new skill modules has begun.</p>	V.	N. A./ OP/Gen.	A	Complete
XII-A (c)	<p>Rec: Managers should develop their supervisors by observing them and instructing them.</p> <p>Resp: This issue will be addressed in conjunction with the response to Recommendation XII-A-f. Has been addressed with all Managers on many occasions. New Supervisory Development Program includes management overview and involvement in the development of their subordinate supervisors. This training will be ongoing and will also be an integral part of the GPUN Management Development process. This item remains open with 80% completion of the Supervisory Development Program expected during the 3rd Q 1985.</p>	V.	N. A./ Gen.	B	3rd Q 1985
XII-A (d)	<p>Rec: Spot, unannounced visits by all division directors to work areas to evaluate effectiveness.</p> <p>Resp: All Division Directors will visit each of their locations where they have personnel at least per month starting 7/1/83. It will not be once efficient to have very many unannounced visits to other locations from the Division Director's normal location be unannounced. This will include inspecting or observing actual work areas. Division Directors are complying with recommendation.</p>	III.	OP/Gen.	A	Complete.

BETA FINDING/ RECOMMEND.		PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
XII-A (e)	Rec:	Improve senior management use of GPUNC performance evaluation system relating to supervisory performance.	IV.	H. R./ General	A	Complete *
	Resp:	Improvements made in 1982 and identified for 1983 provide more effective system. Emphasized in guidance for 1983 review. New system vast improvement and is being used; system use and importance reviewed with managers on many occasions. Better definitions relating to job requirements of supervisors included. Performance evaluations were completed for all top management people. Needs continued emphasis but as result of improvement thus far, recommend close out 4Q '83.				
XII-A (f)	Rec:	As forces stabilize, supervisors should spend more time in people matters.	IV.	OP/Gen.	A	Complete *
	Resp:	See response to XII-A(c) above. The 1984 GPUN Corporate Goals & Objectives fully support this concept. The T&E Dept. is developing a consistent management development program at all levels dealing with interpersonal/people-related skill development. At present, heaviest emphasis is being placed on supervisory training. New programs have been reviewed and are being considered for managerial and executive level. This item should be considered closed.				<ul style="list-style-type: none"> • M&C fully supports concept; incorporated in supervisory development programs. • R&EC supports; supervisors spending more time in this area. • TMI-1 totally support. Emphasis at manager's and supervisor's meetings. An ongoing requirement, but consider specific action item complete.
XII-A (g)	Rec:	Remove ill-suited supervisors or solve negative attitudes.	IV.	OP/Gen.	A	Complete *
	Resp:	Being addressed on a continuing basis. The new performance evaluation system should improve effectiveness in identifying personnel ill suited for their present assignments. We will continue to focus on identifying and resolving such problems. Major progress has been made.				Specifically reviewed and addressed during 1983 Performance Reviews.
XII-A (h)	Rec:	Senior management should be sensitive to evidence of poor supervision wherever observed (system or contractor personnel).	IV.	OP/Gen.	A	Complete *
	Resp:	See response to XII-D(b) and XII-A(g). Major progress has been made. Continue emphasis but recommend complete by 4Q '83. M&C has incorporated in on- and off-shift tours.				Specifically reviewed and addressed during 1983 Performance Reviews.

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE		CAT.	DIVISION	STATUS CODE	COMMENTS
XII-A (i)	Rec:	Review provisions in contracts with major contractors to see what means exist for GPUNC to monitor, report, and take action in cases of poor or insufficient supervision.	IV.	Admin./ Gen.(MM)	A	Complete *
	Resp:	"General Conditions" are included as part of all contracts for furnishing labor and/or supervision. Article X-IX "Contractor Personnel" states in part that at any time during the course of the work, the owner has the right to terminate contractor personnel for cause and ask for replacements at expense of contractor. Standardized Terms and Conditions were published in 5/83, coordinated with all Divisions, and briefed to the GPU Nuclear Staff. Article 45 establishes the requirement for assignment of only qualified, experienced and trustworthy contractor employees. We retain authority to have employees removed for non-performance.				
XII-A (j)	Rec:	Trending of data to ascertain problem areas.	III.	Admin.	B	4th Q 1984
	Resp:	The Activity Indicator Display program has been implemented and we will continue to examine problem areas. Major effort still required. At TMI-1 some data, such as budget, job tickets, chemistry analyses and radiological parameters, currently being trended. Major emphasis on operating parameters will be started and in place within 6 months after restart. M&C has trending program which will identify problem areas.		Gen./OP		
XII-A (k)	Rec:	Corrective action for cases of personal appearance, demeanor, etc. - considered outside the norm.	III.	H. R.	A	Complete
	Resp:	Day-to-day actions are being addressed. Policies will be issued and stressed by management on expected behavior and demeanor. AP-1029, Conduct of Operations, directly addresses. Managers briefed in standards of formality and professionalism. Policy memo issued on shoes and T-shirts at OC. M&C has addressed to management/supervisory level importance of attitude and business-like appearance.		Gen./OP		

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
XII-A (1)	<p>Rec: Color-code hard hats at the site to distinguish workers, foremen, officers, contractors.</p> <p>Resp: Color coding of hard hats has been revised at Oyster Creek. TMI-1 and O.C. Division Directors will review this item and coordinate on desirable further revisions. At TMI-1, exempt and non-exempt wear different color hard hats. No current plans to change system to include all categories of people listed. M&C supports; consideration must be given to contractor identification requirements.</p>	IV.	TMI-1/ Gen./O.C.	D	3rd Q 1984
<u>Finding XII-B:</u> There is too much paper being generated and distributed throughout the GPUN organization.					
XII-B (a)	<p>Rec: Each division director should help ensure distribution is necessary.</p> <p>Resp: A specific effort has been initiated at the officer level to identify and use "case studies." Examples of inappropriate distribution of documents. Corporate Goal 8 also addresses this issue. Operations Analysis study of paperwork at TMI completed with meaningful recommendations. The group helped TMI-1 reduce paper generation by more than 10%. At least a year is needed to implement the recommendations and measure their effectiveness. The Operations Analysis Group is planning to conduct similar studies in other divisions. Will need time to coordinate and implement their recommendations for the Company as a whole.</p>	III.	Admin. Gen./OP	B	4th Q 1984
XII-B (b)	<p>Rec: Tighten signature authority; monitor for compliance.</p> <p>Resp: This issue is being (or has been) reviewed in each division to see whether more formal guidance is needed.</p>	III.	Admin. Gen./OP	B	<p>4th Q 1984</p> <ul style="list-style-type: none"> • Complete for TMI-1 Communication with other divisions is parallel or downward. • Addressed in M&C procedures and monitored in an ongoing review process.
XII-B (c)	<p>Rec: Correspondence control, action item tracking.</p> <p>Resp: Action Item Tracking System implemented. All Licensing Managers trained in use of system. Loading data base in progress.</p>	III.	Admin. Gen./OP	A	Complete
XII-B (d)	<p>Rec: Control issuance of administrative procedures.</p> <p>Resp: GPUN Policy Plans and Procedure System has been issued and has been implemented for control of Administrative procedures.</p>	III.	Admin. Gen./OP	A	Complete

BETA FINDING/ RECOMMEND.	PARAPHRASED RECOMMENDATION & SUMMARY RESPONSE	CAT.	DIVISION	STATUS CODE	COMMENTS
XII-B (e)	Rec: Limit required concurrences on documents/procedures. Resp: O/P action on this issue will be continued. Further emphasis needed. Documents being considered as part of Corporate Paperwork Reduction Study. Formal procedure system has been stream lined to implement limits on required concurrence.	III.	Admin. Gen./OP	B	4th Q 1984 • Ongoing M&C practice to minimize signatures on documents.
<u>Finding XII-C:</u> There is an overall tendency within GPUN to force decision-making too high up in the organization.					
XII-C	Rec: All levels of management should review decision making in their groups to assure decisions are being made at the proper level commensurate with the need. Do not unnecessarily force decisions upward. Resp: This issue will be covered in the meetings being held to meet Corporate Goal 5. Must receive continued attention but consider much improvement has been achieved.	III.	OP/Gen.	A	Complete
<u>Finding XII-D:</u> There appears to be a reluctance within the GPUN system to take action either to improve the performance of poor performers or to terminate their employment.					
XII-D (a)	Rec: Review for practical usefulness, GPUNC procedure addressing poor performers. Resp: Progressive discipline procedure developed and in use. H. R. will be working with each Division to review all Performance Appraisals of 3.4 or below and specific plans for improvement will be developed where appropriate. Review to be completed 4Q '83, follow-up during 1984. Program in place to review all people with rating in the 2 level or lower.	IV.	H. R./ General	B	4th Q 1984 • Complete for TMI-1 • Incorporated in on- and off-shift tours by M&C.
XII-D (b)	Rec: Each Division Director assure proper action is taken to correct performance where called for, or if unsatisfactory performance persists - discharge. Resp: This issue has been specifically addressed in both O/P and Division Director staff meetings. Appropriate disciplinary actions taken. See Findings XII-A(k) and XII-D(a) above.	IV.	OP/Gen.	A	Complete
<u>Finding XII-E:</u> Since the creation of GPUN, too many small groups (cells or staffs) have been formed to carry out functions which should be handled within the normal functioning groups.					
XII-E	Rec: Each director review manpower staffing to reduce unnecessary small staff build-ups. Resp: Staffing of all Divisions were reviewed as part of '84 budget preparation. Overall 1-2% reduction planned for 1984. Operations Analysis is studying.	II.	O/P	B	4th Q 1984

APPENDIX A

GPUNC CORPORATE AND DIVISION GOALS AND OBJECTIVES
REFERENCED IN RESPONSES

1983 CORPORATE GOALS & OBJECTIVES

Corporate Objectives

5. Improve GPU Nuclear's functional capabilities within the authorized manning levels.

Corporate Goals

5. Provide an initial five-year corporate plan with defined milestones and objectives by June 1, 1983, to use for budget planning for 1984 and beyond.
8. Have mechanisms in place by June 1, 1983, for identifying and stimulating abolishment of unnecessary paperwork, documentation, or procedural complexity.
9. Conduct at least two hour discussion sessions with a minimum of 300 exempt employees below the department head level on the functions, responsibilities, and interactions of the various elements of the organization by July 1, 1983.

1983 DIVISION GOALS & OBJECTIVES

Oyster Creek Division

4. Improve working conditions and station appearance by: (a) reducing contaminated areas by 20%; (b) reducing areas requiring respiratory protection by 25%; (c) painting and refurbishing 100,000 sq. ft. of area.
5. Substantially improve the material condition of the Oyster Creek Plant by accomplishing a high percentage of the maintenance work scheduled during the 1983 outage.
7. Establish six operating shifts each with two Senior Reactor Operators (SROs).
10. Complete upgraded training programs for all chemistry technicians; initiate formal training programs for all Equipment Operators, and formalize all on-the-job training.
21. Completely revise the plant Chemistry procedures (800 series) by: (a) award contract; (b) begin rewrite; and (c) complete project.
22. Improve Chemistry Technician job performance proficiency by: (a) improve information flow; (b) complete Chemistry parameter trending; (c) increase supervisory oversight; and (d) upgrade documentation.
23. Expand Chemical Laboratory facilities by: (a) place temporary facilities in operation; (b) start construction of permanent facility; (c) complete construction of permanent facility; and (d) obtain all laboratory instrumentation.
24. Implement 24-hour Chemistry support of plant activities.
25. Upgrade Chemistry Technicians' training and complete training.
32. In conjunction with M&C Division, develop a GMS program for computerized equipment history, trending, and Preventive Maintenance scheduling.

46. Revise Plant Engineering organization to provide increased responsiveness in problem solution. Review engineering staffing at Oyster Creek in company with Technical Functions.

IMI-1 Division

2. Each Department Head/Manager discuss the GPU Nuclear Organization Structure and the role, responsibilities, interrelations and goals of the various divisions with all members of his staff by May 1, 1983. Vice President, IMI-1 to discuss this subject with all employees by July 1, 1983.
3. Develop a plan for all IMI-1 procedures to review, revise, update (as required) and achieve compliance with corporate Procedure 1218.01 by June 1, 1983.
5. Achieve a monthly radwaste generation rate of 1000 ft.³ or below and establish plans and schedules for reducing contaminated areas in the plant by March 1, 1983. Prepare monthly progress status reports for the Director, IMI-1.
8. Goals of 192 man-rem maximum total exposure, not including exposure associated with the OISG repairs, and 0.0002 skin contamination per RMF man-hour are established for the plant (includes all personnel, including personnel from other divisions and contractors).

Technical Functions Division

1. Develop a system for work load management in support of Technical Functions Departments.
2. Refine, expand and formalize the earned value performance measurement approach to include both Capital and O&M work. Support projects with engineering contractors.
14. Hire 12 new engineers for the Engineer Training Program. Transfer five Trainees to Oyster Creek and five to IMI-1 from the 1982 Trainee Group.

Nuclear Assurance Division - Training & Education Department

1. Develop and implement a plan for coordination of training activities at the three sites.
3. Increase use of behavioral learning objectives and criterion-referenced instruction to provide demonstration of knowledge and understanding by student.
4. Develop a method for test preparation and validation to improve the quality and results of testing in areas such as quiz and test grade evaluation and test question preparation and validation.
5. Complete implementation of instructor qualification and evaluation procedure.
6. Develop and present instructional modules utilizing the Basic Principles Trainer AI IMI.

Administration Division

3. Ensure and improve division and department responsiveness and visibility to plant and support divisions through (a) regular visitations (1-2 per month) per department and (b) supervisory communication meetings at each site.

Institute of
Nuclear Power
Operations

FEB 10 1984

1100 Circle 75 Parkway
Suite 1500
Atlanta, Georgia 30339
Telephone 404 953-3600

February 2, 1984

Mr. Philip R. Clark
President
GPU Nuclear Corporation
100 Interpace Parkway
Parsippany, New Jersey 07054

Dear Mr. ~~Clark~~ Phil:

As requested, INPO provided some indoctrination training for GPU Nuclear Evaluators, both in Atlanta and at the McGuire Nuclear Station. Enclosed are two reports on that training that were submitted to me by the principal coordinators of the program. The reports describe several potential problems that you may wish to pursue. These reports are provided to you independent of our evaluation program and are intended solely for your assistance and use as desired.

I hope that the training that we provided met your requirements and that the enclosed information is useful. If you have any questions, please contact me or Zack.

Sincerely, .

Dennis

E. P. Wilkinson
President

adw
Enclosures

cc: Mr. Z. T. Pate

Institute of
Nuclear Power
Operations

Memorandum

Date: December 16, 1983
To: K. A. Strahm
From: R. K. Seiberling
Subject: TMI MONITOR TRAINING

Prepared by:
Reviewed by:
Approved by:

Please find attached the outline I used for the introductory and wrap-up sessions. The actual discussions deviated from the outline in a number of areas, but conformed to the general ideas there. I've also attached the notes I received from other instructors for the course.

In my opinion, the job description for the TMI monitors does not permit or promote effective use of observational evaluation techniques. There may also be a significant problem with the method used for determining and tracking corrective actions resulting from monitor observations.

First, the monitors are obligated to correct any compliance problems on the spot, rather than noting the problems for later correction by the responsible personnel. In so doing, they are assuming responsibility for the correct performance of activities they monitor. I believe this will detract significantly from their potential effectiveness.

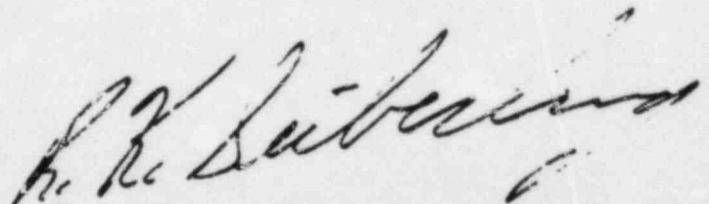
Second, they feel constrained to matters where lack of compliance with written requirements is the issue. Unless written requirements or standards are in effect for TMI, they do not feel they have the authority or responsibility to evaluate and comment.

Third, they apparently bear a significant burden for getting appropriate corrective action completed on time. The problems they note may not be receiving attention at high enough levels of line supervision. Also, from their comments, it appears that line supervisor's responses to their findings are often punitive and clearly in response to a monitor's findings. The result is poor credibility and an adversary relationship with production workers, and reduced monitoring effectiveness.

I recommend you discuss these points with your contacts at GPU Nuclear.

RKS:tjp

Attachments



Institute of
Nuclear Power
Operations

Memorandum

Date: December 22, 1983

To: K. A. Strahm

Prepared by: T. L. Reeder

From: W. S. Garrett/T. L. Reeder

Reviewed by: W. S. Garrett

Subject: PHASE II TRAINING FOR GPU
NUCLEAR EVALUATORS

Approved by:

As specified in your memo of December 7, 1983, Phase II training was conducted at McGuire Nuclear Station for four TMI personnel during the period of December 15-16, 1983.

Purpose

The purpose of this training was to provide selected TMI shift nuclear evaluators with an introduction to INPO evaluation principles and techniques, and demonstrate their application in the field. The training at McGuire exposed the trainees to the following activities:

- ° the recognition of deficiencies and indicators of plant performance during plant tours
- ° the planning and conducting observations of plant activities and how to recognize the quality of performance in observed activities
- ° the preparation of observation reports and the best methods of constructively conveying critical information to management
- ° demonstration of the vertical audit concept to identify root causes of observed symptoms

Approach

A thorough tour of the plant was conducted including the turbine building, water treatment areas, control room and a diesel generator room. In addition, time was spent observing maintenance activities and the conduct of operations in the control room. To avoid lengthy delays caused by the Health Physics badging process, the radiation controlled zone was not entered.

Throughout the in-plant period, examples of indicators of plant and personnel performance were highlighted and discussed. TMI personnel were asked to relate what they thought the problems were and items not seen were pointed out by the INPO personnel.

The use of these observed indicators to develop well founded conclusions and follow-up techniques including vertical audits were discussed and demonstrated. The need to obtain factual information to support suspected poor performance was stressed.

As a follow-up to the in-plant period, a two hour discussion session was held. The TMI personnel were asked to recall some of the evolutions that they had seen and to discuss how they would best express their observations in writing. INPO personnel offered suggestions and stressed the need to present management with a factual account that clearly pointed out areas of weakness.

Comments/Recommendations

The TMI personnel were enthusiastic and genuinely interested in techniques which would improve their job performance. Their reluctance to ask questions resulted in most of the training being undirectional. It is believed that their lack of experience and plant knowledge contributed to this situation. During our time with these people, we formed some subjective opinions based on answers to questions and general participation in the training process which are summarized below:

- ° The general level of knowledge of the shift monitors with respect to power plant hardware and integrated plant operations is low. Responses to questions indicated a need for an aggressive continuing training program to build on the basic training which the monitors have already received.
- ° Shift evaluators were not aware of the many areas within the plant that could provide indicators of plant and personnel performance. Shift evaluator supervisors will need to select specific activities to be monitored and train evaluators on how to effectively determine that these activities are properly conducted.
- ° Three shift coverage with the number of personnel presently in the program will present a particular challenge to maintaining effective communication between shift evaluators and supervision. Effective logs as well as video taped and written training material may be necessary to ensure consistency and uniformity.
- ° The present program requires that each specific deficiency observed be forwarded to responsible levels of supervision and management for corrective action. This highlighting of each individual error could result in corrective actions being directed at specific individuals and could adversely impact the relationship between shift monitors and plant personnel. Consideration should be given to collecting monitor reports and evaluating them for generic implications and root causes. The use of shift monitors as "white rats" should be reserved for situations that will affect personnel, equipment, or plant safety.

December 22, 1983

Page Three

- ° While it is commendable that GPU has created a program to provide oversight for their plant operation, it appears that the implementation of the program is weak. The low knowledge level of evaluator personnel, their recounted problems in interacting with plant personnel and program weaknesses indicate a need for significant management involvement and support to make this an effective and worthwhile program.
- ° Because of the minimum amount of time available to train the TMI personnel, the lack of observation of their actual performance and the undirectional nature of the training period, INPO should be cautious of our involvement in TMI's efforts and avoid any implication of approval of the program.

TLR
WSG/TLR/rm

cc: P. M. Beard, Jr.
C. E. Moore
J. P. Flynn
J. P. O'Hanlon

Subject: INPO Comments on Shift Monitor Program

Date: March 15, 1984
NA/569

From: R. L. Long
Vice President - Nuclear Assurance

Location: Cherry Hill Building

To: P. R. Clark
President

In December 1983, GPUN sent a group of QA Shift Monitoring Engineers and their supervisors to INPO to participate in a training program on INPO evaluation techniques. The program was presented at our request in response to a suggestion made by the NRC staff. We did not request nor did INPO provide any approval of the Monitoring Program. We believe that the INPO training made a useful contribution to the total training received by the Shift Monitors.

In a letter dated February 2, 1984, Mr. Wilkinson, President of INPO, provided copies of two reports that were submitted to him by the coordinators of the INPO program. This memorandum documents our response to these reports.

The Nuclear Assurance Division is appreciative of the support provided by INPO through their training sessions for our Quality Assurance Shift Monitoring Engineering Program. We have evaluated the comments provided to us by Mr. Wilkinson and noted that all items had been addressed or were being addressed by Management at approximately the same time that the training session at INPO was occurring. A few of the comments indicated that there was a lack of full understanding by INPO representatives as to the responsibilities of the shift monitors and the scope of the monitoring program. We have addressed each comment individually, identifying the source of the paraphrased comment in parentheses.

COMMENT: (Mr. Seiberling) The monitors are obligated to correct any compliance problems on the spot, rather than noting the problems for later correction by the responsible personnel. In so doing, they are assuming responsibility for the correct performance of activities they monitor.

RESPONSE: We believe that this represents a misunderstanding of the responsibilities of the Shift Monitors. The QA Shift Monitoring Engineers do not have the responsibility for correcting any problems discovered on shift. They are responsible for notification of the appropriate shift supervisory personnel. These Line Supervisors can then correct the problem on-the-spot if it is a minor problem. If the Line Supervisor desires additional time for review and evaluation, the QA Shift Monitoring Engineer may issue a Quality Deficiency Report. If the problem is corrected on-the-spot by the Line Supervisor, it is still documented by the QA Shift Monitoring Engineer in his or her periodic report. For problems which are corrected on-the-spot, no QDR is issued unless a trend of related deficiencies is detected by the later review.

COMMENT: (Mr. Seiberling) The Shift Monitors feel constrained to matters where lack of compliance with written requirements is the issue. Unless written requirements or standards are in effect for TMI, they do not feel that they have the authority or responsibility to evaluate and comment.

RESPONSE: We believe that the instructions given to QA Shift Monitoring Engineers to evaluate only items involving a lack of compliance with written requirements or standards are appropriate because of their level of experience. They are free to observe any items. When they are unable to readily evaluate compliance because there are no written requirements or standards, they have been instructed to refer such matters to a QA Lead Monitor. The QA Lead Monitors have been certified in various specific technical disciplines (i.e., reactor operations, radiological controls, electrical) based on a higher level of experience in nuclear plant operations. They assist the QA Shift Monitoring Engineers in assessing areas where the Shift Monitor has insufficient training or experience to determine compliance.

COMMENT: (Messrs. Seiberling, Garrett, and Reeder) QA Shift Monitor Engineers apparently bear a significant burden for getting appropriate corrective action completed on time. The problems they note may not be receiving attention at high enough levels of line supervision. Line supervisors' responses to findings are often punitive and clearly in response to a monitor's findings. The result is poor credibility, an adversary relationship with production workers, and reduced monitoring effectiveness.

RESPONSE: The QA Shift Monitoring Engineers do not have responsibility for getting appropriate corrective action completed on time. This responsibility lies with shift supervisory personnel. The QA Shift Monitoring Engineer is only accountable for tracking the status of corrective action and to report to QA management problems with timely completion of corrective action. The punitive action taken by line supervisors in response to adverse findings is a potential problem in any QA, regulatory, or even INPO verification program. Operations management has taken steps to ensure that punitive measures are reserved for instances where the deficiency resulted from an individual's history of failure to comply with Company requirements or policy, or, where an individual's attitude or behavior indicates unsatisfactory efforts to meet personal and Company responsibilities toward requirements. Recognizing that adversary relationships may develop in any verification program, QA personnel have been instructed to ensure a balanced accounting of shift activities. Satisfactory and exceptional performance should be identified, as well as negative findings.

COMMENT: (Messrs. Garrett and Reeder) The general lack of knowledge of the Shift Monitors with respect to power plant hardware and integrated plant operations is low. Shift monitors are not aware of the many areas within the plant that could provide indicators of plant and personnel performance. There is a need for an aggressive continuing training program to build on the basic training which the monitors have already received. Specific areas to be monitored will have to be selected by QA supervisors and the monitors will have to be instructed on how to effectively determine compliance.

RESPONSE: We recognized early in the program that, because of the maturity and experience levels of the personnel selected as QA Shift Monitoring Engineers, an aggressive continuing training program would be required. The program used is a combination of formal classroom training, on-the-job training, simulator observation training, self-study, and the use of written examinations as a measure of training effectiveness. The six shift rotation allows a continuing training and retraining program to provide an ongoing upgrade of Shift Monitor knowledge.

QA Lead Monitors and Senior Management personnel are required to periodically perform backshift tours of the plant. Shift Monitors accompany them on these tours and are instructed in the many areas of the plant which can provide indications of plant and personnel performance.

QA Shift Monitoring Engineer supervision interacts with QA Lead Monitors to determine in which areas the Shift Monitors should concentrate their observations. The Shift Monitors are then specifically trained in these areas so that they may effectively verify performance.

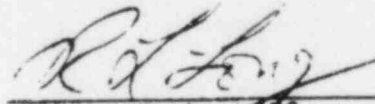
COMMENT: (Messrs. Garrett and Reeder) Three shift coverages with the number of personnel presently in the program will present a particular challenge to maintaining effective communication between Shift Monitors and their supervisors. Effective logs, as well as video taped and written training materials, may be necessary to ensure consistency and uniformity.

RESPONSE: A logging and reporting system for Shift Monitors was implemented when the program was first established. The monitoring supervision provides direct communication and direction on a daily basis, as well as spending portions of shifts with each monitor to assist them in their training and evaluation efforts. The system has provided proper communications support on a 24-hour basis.

COMMENT: (Messrs. Garrett and Reeder) It appears that the implementation of the QA Shift Monitoring Engineer program is weak. The low knowledge level of the Shift Monitors, their recounted problems in interacting with plant personnel, and program weaknesses indicate a need for significant management involvement and support to make this an effective and worthwhile program.

RESPONSE: Each Shift Monitor holds a BS degree in Engineering or related sciences. They are not reactor operators nor experts in nuclear power plant activities; but we believe it is misleading to say that they have a "low knowledge level". They have received specific training in many of the routine activities that they will encounter on a day-to-day basis within the plant. As they gain more experience on shift, they will become increasingly effective in assessing shift performance and compliance. In the interim, they are provided with 24 hour support by QA management and supervision and have an assortment of technically qualified and certified QA Lead Monitors to assist them in making evaluations of activities in which they cannot readily verify compliance because of their own experience level. There is an ongoing significant management involvement with the program.

It was a desire on our part to upgrade the knowledge of our Shift Monitors that prompted us to send a group to be trained in the INPO evaluation techniques. The responsibilities of our Shift Monitors are somewhat different from those of INPO Inspectors; however, we have found the experience to be beneficial. The impressions which we received from the INPO Instructors indicate that we may have a lack of understanding on the part of our Shift Monitors as to what their responsibilities are. Steps have been taken to assure that any misunderstandings are resolved.


R. L. LONG
V.P. Nuclear Assurance

RLL/DJC/lab

cc: Dr. Z. T. Pate - Executive Vice President
Institute of Nuclear Power Operations (INPO)



GPU Nuclear Corporation
Post Office Box 400
Route 441 South
Middletown, Pennsylvania 17057-0191
717 944-7621
TELEX 84-2386
Writer's Direct Dial Number:

February 23, 1984
5211-84-2041

Office of Nuclear Reactor Regulation
Attn: H. Denton, Director
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

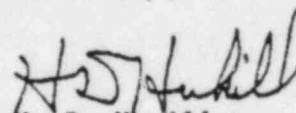
Dear Sir:

Three Mile Island Nuclear Station, Unit 1 (TMI-1)
Operating License No. DPR-50
Docket No. 50-289
Master Restart Schedule

The attached master restart schedule has been revised to include work on reactor coolant pump 1B prior to precritical non-nuclear hot functional testing. Vibration problems necessitate inspection of the pump shaft. This work will not impact our scheduled capability of June 1, 1984 criticality. We reiterate our pending request for approval to perform the hot testing program.

In order to take best advantage of this "precritical" period, we have scheduled the completion of the other major work items and surveillances, including containment integrated leak rate testing. Modifications for which milestone delays are perceived will be rescheduled beyond restart. None of the above modifications or plant activities will preclude our ability to complete precritical non-nuclear hot functional testing prior to June 1, 1984.

Sincerely,


H. D. Huxill
Director, TMI-1

HDH:RAS:vjf
Attachment
cc: J. F. Stolz
H. Silver
J. Van Vliet
R. Conte

R. J. Toole

Update No. _____

Date: _____

FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER
MAJOR PLANT ACTIVITIES									
Repair RC-P-1B	Fill RCS & Test Pump 1B [] []	[] []							
Prep for RB ILRT (LLRT & INST)	ILRT []								
Inspect PORV []		Balance RCPs as Required/Maintain Wet Layup []							
Remove Handholes/ Install Dehumids	Dry Layup [] Reinstall Handholes/Covers []	Criticality 06/01/84 [2A] [] [HFT]		ZIPT []	48% Pwr Operator Training [] PET	75% Pwr Operator Training []	100% Pwr Operations [4]	Eddy Current Outage []	
	Replace Manway Gaskets []					50% Pwr + 120			
MAJOR MODIFICATIONS									
Prep for 8th Stage Heaters []	Replace 8th Stage Heaters []								
	Hydro & Elec Ck. Compl. Head Vent [] Hyd Vent []	Compl. IML Head Vent []							
Improve Eng. Date CRD Shunt Trip to Mid Mar.	Construct CRD Shunt Trip []	Test CRD Shunt Trip []							
Issue RM-L-12 Eng	Compl. Const. []	Test RM-L-12 []							
Helium Leak Test for RB-13H []							Management Hold Point (Flag) [3]		
	Remove U-2 Atmos Dump Vlv. M&C Install Vlv. Bodies Plant Fit Internals []								
Change Cables On NR Pumps		Test []							
Expedite Eng. for Water Inventory	Construct []	Delay []	Construct []						
EFW Long Term Upgrade-Recirc Line Reroute & Supports Atmos. Dump []									
Control Tower Spray on Fireproofing Area Over C.R. []									

Legend

Baseline _____

Forecast

PLANS & PROGRAMS DEPT., TH-1