NUCLEAR REGULATORY COMMISSION
REGION I
631 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

JAN 2 0 1987

MEMORANDUM FOR: James M. Taylor, Director, IE

FROM: Thomas E. Murley, Regional Administrator, RI

SUBJECT: PROPOSED ENFORCEMENT ACTION - NINE MILE POINT, UNIT 2

The first LCO violation involved an inoperable Source Range Monitor (SRM) for approximately five hours during initial fuel load of the reactor. The SRM was inoperable in that its scram function was bypassed during the performance of a surveillance test involving SRM functional tests, but was not returned to service following completion of the test. The ability of the SRM to provide count rate indication in the control room was unaffected. During the time the SRM's scram function was inoperable, 19 fuel bundles were loaded into the reactor in the quadrant in which the SRM was inoperable. This condition existed until identified during a routine control panel walkdown conducted during the first shift turnover following the surveillance test.

The second LCO violation involved the bypassing of all four SRM downscale rod block channels for approximately 2½ hours while the reactor was in the refueling mode. There was no movement of fuel during this time. The four SRM rod block channels were bypassed by installing jumpers so that the reactor mode switch interlock surveillance test could be performed. This condition was contrary to the technical specifications which required that at least two rod block channels be operable. This violation is also considered to be of low safety significance because there was no movement of fuel or control rods during this time.

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Please note that this memo and Enclosure 1 are being sent on this date to you, the Director of Enforcement, IE, and OGC via the 5520. Enclosure 2, the inspection report, was issued on December 17, 1986, and was previously sent to the Director of Enforcement, IE, and OGC via the Document Control Room.

Thomas E. Murley
Regional Administrator

Enclosures:
1. Letter and Notice of Violation
2. Inspection Report No. 50-410/86-56
3. Licensee Event Report 86-02
4. Licensee Event Report 86-05

cc w/encl:
Enforcement Directors, RII - RIII
Enforcement Officers, RIV - V
B. Beach, IE
J. Lieberman, OGC
K. Abraham, PAO

Redispatched to include Attachment A & B

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

April 12, 1989

Docket Nos. 50-220
and 50-410

MEMORANDUM FOR: Bruce A. Boger, Assistant Director
for Region I Reactors
Division of Reactor Projects I/II

FROM: Robert A. Capra, Director
Project Directorate I-1
Division of Reactor Projects I/II

SUBJECT: COMPARISON OF THE 1986 NMP-1 I&C TECHNICIAN ALLEGATIONS WITH RESULTS OF 1989 NMP 1/2 SPECIAL TEAM INSPECTION FINDINGS

As requested by the Deputy Director, NRR, we have compared the preliminary findings of the March 1989 NRR Special Team Inspection (STI) at Nine Mile Point Units 1 and 2 (NMP 1/2) with the July 1986 allegations made by an NMP-1 Instrument & Control (I&C) technician. The purpose of the comparison was to determine whether any of the original allegations were still found to exist.

In order to put this comparison in perspective, it must be recognized that the 1989 NRR STI did not specifically review the original I&C Technician's allegations. It is also necessary to understand the licensee's and NRC's actions taken in response to the allegations and to understand what has taken place at NMP between the time of the allegations in July 1986 and the NRR STI in February/March 1989. Enclosure 1 provides a chronological summary of major actions associated with the allegations and related programmatic issues from July 1986 through March 1989.

The I&C Technician's allegations (see Attachment A to Enclosure 1) were independently evaluated in 1986 by a Region I Special Team Inspection. The team concluded that most of the circumstances described in the allegations were substantially true, but the technical significance of the substantiated allegations was found to be generally minor and no immediate safety concerns were identified. However, the team did conclude that there were some major programmatic weaknesses in the NMPC management system that allowed these problems to develop and go unresolved.

Since the majority of the I&C Technician's concerns were very specific technical allegations, there is no direct comparison between the original I&C Technician's allegations and the preliminary listing of significant findings from the 1989 NRR STI (see Attachment B to Enclosure 1).

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However, as with the 1986 RI STI, many of the the preliminary findings from the 1989 NRR STI represent continued deficiencies in organizational effectiveness and procedural inadequacy and noncompliance, and are examples of why NMP-1 has remained shutdown under Confirmatory Action Letter. These broad programmatic weaknesses at NMPC, particularly at NMP-1, have been documented consistently in NRC inspection reports and in the licensee's own internal audits and self-assessments. These include inspections and audits prior to the allegations such as the Construction Assessment Team report (CAT) of NMP-2 in January 1984 and the Management Analysis Company (MAC) report of NMP-2 in March 1985.

Specifically, the 1986 STI indicated that procedural inadequacy and noncompliance were contributing factors to many of the technical allegations substantiated by the inspection team. The 1989 STI reaffirmed that this major weakness still existed at both units, particularly in the areas of operations, surveillance testing and maintenance. Following the 1989 STI, NMPC clarified existing corporate and station policy regarding procedural adherence and conducted additional training on this subject prior to the April 1989 Unit 2 startup from their midcycle outage.

The 1986 STI found that methods used to identify shortcomings and potential problems had not been implemented and consequently, problems identified by NMPC staff were not always brought to management attention for resolution. The 1989 STI found examples of similar problems still occurring in surveillance testing, maintenance, design change control, corrective action programs, training and onsite and offsite committee activities.

The 1986 STI also found that organizational ineffectiveness, manifested in weak NMPC review methods and management oversight, limited their ability to accurately identify problems and evaluate program effectiveness. The licensee recognized these problems and effected various corporate and site management changes, including the hiring of a new Executive Vice President - Nuclear Operations in October 1988, to implement increased oversight of station operations. Although some progress has been made, the 1989 STI identified that many organization effectiveness issues remain to be resolved.

The 1986 STI found that the operational quality assurance (QA) program was ineffective in helping the line organization to identify and correct problems. The 1989 STI found that while the QA surveillance organization provided good performance-based findings, shortcomings still existed in the QA Audit program. The team found that audit schedules were slipping, the auditor training program was weak, the QA Audit Group was understaffed, unaware of current issues and unable to proactively audit plant activities.

In summary, the 1989 NRR STI did not identify recurrence of any specific issues originally identified as part of the 1986 I&C technician allegations. However,

many issues dealing with program weaknesses and organizational effectiveness identified during the 1986 RI STI were also identified during the 1989 STI indicating that corrective actions were largely inadequate. These items have been identified for resolution in the licensee's Restart Action Plan and Nuclear Improvement Plan.

Original signed by

Robert A. Capra, Director
Project Director I-1
Division of Reactor Projects I/II

Enclosure:
As stated

cc w/enclosure:
T. Murley
J. Sniezek
J. Partlow
B. Grimes
S. Varga
W. Kane, RI
A. Gody

ENCLOSURE 1

COMPARISON OF THE 1986 NMP-1 I&C TECHNICIAN ALLEGATIONS WITH RESULTS OF 1989 NMP-1/2 SPECIAL TEAM INSPECTION FINDINGS

PURPOSE:

As requested by the Deputy Director, NRR, we have compared the preliminary findings of the March 1989 NRR Special Team Inspection (STI) at Nine Mile Point Units 1 and 2 (NMP 1/2) with the July 1986 allegations made by a NMP-1 Instrument & Control (I&C) technician. The purpose of the comparison was to determine whether any of the original allegations were still found to exist.

In order to put this comparison in perspective, it must be recognized that the 1989 NRR STI did not specifically evaluate followup of the original I&C Technician's allegations. It is also necessary to understand the licensee's and NRC's actions taken in response to the allegations and to understand what has taken place at NMP between the time of the allegations in July 1986 and the NRR STI in February/March 1989. This comparison provides a chronological summary of major actions associated with the allegations and related programmatic issues from July 1986 through March 1989.

INITIAL NRC ACTIONS REGARDING THE I&C TECHNICIAN ALLEGATIONS:

On July 11, 1986, while observing maintenance on local power range monitor (LPRM) connectors at NMP-1, the NRC Resident Inspector received allegations concerning the connector qualifications and installation techniques from an I&C technician. The technician subsequently met with NMPC to convey his concerns. On July 22, 1986, the technician came to the NRC Region I office to discuss his concerns. Following the transcribed meeting, he provided a sworn statement regarding his concerns.

On August 11, 1986, the NRC sent a letter to NMPC enclosing a summary of the I&C technician's allegations (Attachment A). The letter acknowledged the ongoing NMPC investigation into the concerns and requested a written report on the results.

In a letter dated August 15, 1986, NMPC outlined its approach to investigation of the allegations and provided a summary report of the investigations and associated conclusions. NMPC concluded that no activities were found which would jeopardize the safe operation of the station. A meeting was held with NMPC in the regional office on August 18, 1986 to discuss the findings. By a follow-up letter dated August 31, 1986, NMPC provided: (1) its investigation findings relative to the allegations, (2) its evaluation methodology, (3) its proposed short-term and long-term remedial actions, and (4) its means to measure the effectiveness of those actions.

REGION I FOLLOWUP ACTIONS:

Between August 25-29, 1986 a Region I special team inspection (STI) independently examined the I&C technician's allegations related to operations, surveillance, maintenance and quality programs at NMP-1. For each allegation, the inspection reviewed the allegation, determined the basic concern, and focused on the root cause of the technical issues from the perception of the NRC to assess the impact on Unit 1 and 2 programs. The inspection also reviewed portions of NMPC's investigation of the allegations to assess its effectiveness. Also, an evaluation of the quality assurance programs at Units 1 and 2 was performed to evaluate the ability of these programs to identify and correct the problems associated with the allegations.

RESULTS OF THE 1986 REGION I SPECIAL TEAM INSPECTION:

The results of the Region I STI were documented in a combined inspection report issued January 22, 1987 (50-220/86-17; 50-410/86-61). The team concluded that most of the I&C Technician's allegations were found to be factually correct; however, the individual safety implications were determined to be minor and no immediate safety concerns were identified. Nevertheless, the team did conclude that there were some programmatic weaknesses in the NMPC management system that needed to be addressed. In particular, the team concluded that:

1. Methods within the organization to identify shortcomings and potential problems have not been effectively implemented. As a result, problems identified by NMPC staff are not always brought to the attention of management for resolution.

2. Once issues are identified, there are weaknesses in the NMPC review methods and management oversight which in some cases effect the ability to:
   - determine contributors to the problems or event,
   - identify the root causes, and
   - evaluate the impact on broad program effectiveness.

3. The NMPC Operational Quality Assurance (QA) program was not as effective as it should be in helping the line organization to find and correct problems.

The inspection team acknowledged the alleged harassment of the I&C technician by his peers and supervisor for bringing these issues to NMPC QA and to the NRC. However, as documented in an NRC letter dated August 18, 1989, the NRC recommended that these issues be presented to the U.S. Department of Labor (DOL) by the alleger and that further NRC action would be dependent upon DOL action and NRC review of the final NMPC investigation report.

ENFORCEMENT ACTION STEMMING FROM THE ALLEGATIONS:

As a result of the Region I special team inspection report and two other inspections related to the allegations, an Enforcement Conference was held on February 19, 1987. A Notice of Violation and Proposed Imposition of Civil Penalty was issued on April 29, 1987. The letter of transmittal identified underlying weaknesses in the control of licensed activities at Unit 1. In particular: (1) problems identified by NMPC staff were not always brought to the attention of management for resolution; (2) problems were not adequately analyzed to determine their root causes; (3) corrective actions taken for identified problems lacked thoroughness and depth; and (4) the Quality Assurance Department had not been effective in assisting the line organizations in identifying and correcting problems.

The specific violations included numerous examples of failure to follow station procedures when performing maintenance and surveillance testing, and when controlling measurement and test equipment; failure to properly evaluate test results; failure to perform adequate radiation surveys; failure to follow procedures for personnel radiation protection; and failure to provide adequate radiation surveillance in the work area. The transmittal letter stated that these weaknesses further demonstrated an apparent complacent attitude among certain members of the NMPC staff which may have contributed to declining performance and an increase in the number of operational problems at Unit 1. Additionally, the violations also indicated NMPC's system for resolving employee concerns was inadequate in that the I&C technician had discussed his concerns with supervision prior to contacting the NRC, but timely and effective action was not taken to analyze and resolve his concerns.

In the aggregate the issues were classified as Severity Level III and a cumulative $50,000 Civil Penalty was assessed.

NMPC'S RESPONSE TO THE ENFORCEMENT ACTION STEMMING FROM THE ALLEGATIONS:

On May 19, 1987, NMPC responded to the April 29, 1987 Notice of Violation and Proposed Imposition of Civil Penalty. In its response, NMPC stated that it had taken extensive actions to resolve each deficiency discussed in the NOV and to develop or enhance programs to prevent recurrence. As a long-term measure, NMPC implemented a formal Management Effectiveness Program. This program included the following: developing of Division policy statements and charters; streamlining of procedures; identifying individual responsibility and accountability; and measuring success and providing feedback to management on performance and problems.

The next few pages discuss the major activities that took place between closeout of the I&C technician concerns and the NRR STI.

INEFFECTIVE CORRECTIVE ACTIONS - ADDITIONAL CONCERNS:

As a result of a major feedwater system transient, Unit 1 was manually scrammed on December 19, 1987. The Unit has remained shutdown since that time.

In October 1987, deficiencies in the licensee's ISI program were identified by the NRC. Discrepancies known by the licensee to exist during the 1986 refueling outage were not properly reconciled prior to the end of that outage. In January 1988, during a review of records, the licensee determined that many other inspections had been missed. To complete these inspections, the licensee decided to enter the 1988 refueling outage early. On January 7, 1988 an Enforcement Conference was held to discuss the ISI deficiencies. On March 14, 1988, a Notice of Violation and $100,000 Civil Penalty was issued as a result of ISI deficiencies.

An inspection of the licensee's licensed operator requalification program, conducted during January 1988, revealed discrepancies in their requalification training program. On March 13, 1988, Confirmatory Action Letter (CAL) 88-13 was issued to formalize the licensee's actions to correct the problems identified with the requalification program for licensed operators.

In March 1988, the licensee discovered that numerous safety-related fire barrier penetrations were not properly sealed. An Enforcement Conference was held on July 11, 1988. However, after considering the matter, escalated enforcement action was determined to be inappropriate and two Severity Level IV violations were issued.

In June 1988, an EOP team inspection was conducted to determine the usability of Unit 1 EOPs. The results of this inspection showed that the operators lacked knowledge of the EOPs and their use.

JUNE 1988 SENIOR MANAGEMENT MEETING AND ISSUANCE OF CAL 88-17:

At the June 1988 NRC Senior Management Meeting (SMM), NMP-1 was added to the list of facilities requiring closer NRC monitoring. At the meeting, it was determined that NMPC's actions represented a trend in performance that was of significant concern to the NRC. In particular, the most recent SALP report expressed concern about leadership weaknesses and NMPC's failure to seek out and correct technical and management problems before they became regulatory concerns. It was also noted that previous licensee efforts to bring about long-term changes in performance at NMP-1 had met with limited success and that NRC was concerned regarding the lack of a comprehensive plan to correct the root causes of major program deficiencies including inservice inspection, fire protection, emergency procedures, and operator training issues to support restart of Unit 1.

On July 25, 1988, a meeting between NMPC and Senior NRC Managers was held on site. At the meeting, CAL 88-17 was delivered. With the issuance of CAL 88-17 (which superseded CAL 88-13) NMPC agreed that the following actions would be taken prior to restart of Unit 1:

- Determine and document the root cause(s) of why NMPC management has not been effective in recognizing and remedying problems.

- Prepare a proposed restart action plan (RAP) and submit it to the NRC for review and approval. The RAP should document and justify short- and long-term actions to address the identified root cause(s).

- Provide a written report relative to the readiness of NMP-1 for restart. Include in the report, the bases for readiness to restart, a self-assessment of RAP implementation, and conclusions regarding whether NMPC's current line management has the appropriate leadership and management skills to prevent, or detect and correct, future problems.

On July 20, 1988, the licensee formed a Restart Task Force to act as the focal point in completing the actions required by CAL 88-17.

DECEMBER 1988 SENIOR MANAGEMENT MEETING:

At the December 1988 SMM, NMPC's activities to develop a comprehensive plan to address actions required by CAL 88-17 were discussed along with recent corporate and site management changes. In addition, the first year of Unit 2's operating history was discussed. Because of Unit 2's overall performance with respect to scrams, safety system actuations, design deficiencies, recent personnel errors, and since Units 1 and 2 have common senior management and technical support organizations, it was determined that Unit 2 also warranted closer monitoring by the NRC.

As a result of the SMM, it was also determined that part of the closer NRC monitoring would include an NRR Special Team Inspection.

SUBMISSION OF THE RESTART ACTION PLAN AND DEVELOPMENT OF THE NUCLEAR IMPROVEMENT PLAN (NIP):

On December 22, 1988, NMPC met with the NRC Staff and presented its Restart Action Plan (RAP). The RAP contains items that must be corrected prior to Unit 1 restart. The licensee has also developed a Nuclear Improvement Plan. The NIP contains issues which must be resolved by NMPC but are not required to be completed prior to Unit 1 restart. Many of the management and program issues identified by the staff in CAL 88-17 were the same as the issues originally identified in the NRC's follow-up to the I&C Technician's allegations. Therefore, one of the major staff concerns regarding the RAP,

was to understand why the licensee believed the RAP would succeed in light of the failure of the program developed to address the I&C technician allegations.

In addressing this issue in the RAP, the licensee stated that it believes that shortcomings in past initiatives resulted from deficiencies in management and organizational effectiveness as evidenced by the absence of buy-in by line management; resources applied to NMP-2, at the expense of NMP-1; too narrow a focus in identifying root causes and corrective actions; and too short an evaluation time.

The licensee believes that these shortcomings will not appear in implementing the RAP because of the following actions which were taken in the present process to address management and organizational effectiveness:

1. A more comprehensive effort to identify issues;
2. A more structured analysis with formal root cause assessment and emphasis on human performance;
3. An iterative effort involving a process of buy-in by the line organization relating to the identification of issues, root causes and corrective actions, and implementation of the required actions;
4. An issue analysis with emphasis on a deeper look at management, including a comprehensive look at past problem areas for trends and common root causes;
5. A comprehensive look by all levels of supervision to identify, track, resolve, and close out problems not previously documented; and
6. A systematic review by senior management and experienced, outside consultants.

In addition to the above, one of the Specific Issues identified in the RAP is closeout of programmatic issues associated with the I&C technician allegations.

Subsequent to the submission of the RAP the staff has met on two occasions with the licensee regarding questions concerning the RAP. Formal staff review of the RAP is ongoing.

NRR SPECIAL TEAM INSPECTION:

During the months of February and March 1989, the NRR Special Team Inspection (STI) directed by the December 1988 SMM was conducted. The objective of the NRR STI was to assess the effectiveness of licensee management oversight, including self-assessment, of the operational safety performance of the facility. Emphasis was placed on attempting to determine the root causes and contributing factors to fundamental, underlying problems previously identified, and to determine if management develops and ensures implementation of timely and effective corrective action for identified problems.

A complete, but preliminary, listing of significant findings from the NRR STI is included as Attachment B. In general, the team concluded that the majority of its findings had been previously identified by the NRC, INPO, and the licensee. However, some corrective action was ineffective and progress on implementing the corrective actions was slow with limited success to date.

COMPARISON OF 1989 NRR STI FINDINGS WITH THE 1986 I&C TECHNICIAN ALLEGATIONS AND FINDINGS OF THE RI STI:

The I&C Technician's allegations (see Attachment A) were independently evaluated in 1986 by a Region I Special Team Inspection. The team concluded that most of the circumstances described in the allegations were substantially true, but the technical significance of the substantiated allegations was found to be generally minor and no immediate safety concerns were identified. However, the team did conclude that there were some major programmatic weaknesses in the NMPC management system that allowed these problems to develop and go unresolved.

Since the majority of the I&C Technician's concerns were very specific technical allegations, there is no direct comparison between the original I&C Technician's allegations and the preliminary listing of significant findings from the 1989 NRR STI (see Attachment B).

However, as with the 1986 RI STI, many of the the preliminary findings from the 1989 NRR STI represent continued deficiencies in organizational effectiveness and procedural inadequacy and noncompliance, and are examples of why NMP-1 has remained shutdown under Confirmatory Action Letter. These broad programmatic weaknesses at NMPC, particularly at NMP-1 have been documented consistently in NRC inspection reports and in the licensee's own internal audits and self-assessments. These include inspections and audits prior to the allegations such as the Construction Appraisal Team (CAT) report of NMP-2 in January 1984 and the Management Analysis Company (MAC) report of NMP-2 in March 1985.

Specifically, the 1986 STI indicated that procedural inadequacy and noncompliance were contributing factors to many of the technical allegations substantiated by the inspection team. The 1989 STI reaffirmed that this major weakness still existed at both units, particularly in the areas of operations, surveillance testing and maintenance. Following the 1989 STI, NMPC clarified existing corporate and station policy regarding procedural adherence and conducted additional training on this subject prior to the April 1989 Unit 2 startup from their midcycle outage.

The 1986 STI found that methods used to identify shortcomings and potential problems had not been implemented and consequently, problems identified by NMPC staff were not always brought to management attention for resolution. The 1989 STI found examples of similar problems still occurring in surveillance testing, maintenance, design change control, corrective action programs training and onsite and offsite committee activities.

The 1986 STI also found that organizational ineffectiveness, manifested in weak NMPC review methods and management oversight, limited their ability to accurately identify problems and evaluate program effectiveness. The licensee recognized these problems and effected various corporate and site management changes, including the hiring of a new Executive Vice President - Nuclear Operations in 1988, to implement increased oversight of station operations. Although some progress has been made, the 1989 STI identified that many organization effectiveness issues remain to be resolved.

The 1986 STI found that the operational quality assurance (QA) program was ineffective in helping the line organization to identify and correct problems. The 1989 STI found that while the QA organization provided good performance-based findings, shortcomings still existed in the QA program. The team found that the QA Audit Group was understaffed and audit schedules were slipping; the auditor training program was weak; and, because the audit group was omitted from the distribution for LERs, ORs, or SORC and SRAB meeting minutes, they were unaware of current issues and unable to proactively audit plant activities.

SUMMARY:

In summary, the 1989 NRR STI did not identify recurrence of any technical issues originally identified as part of the 1986 I&C technician allegations. However, many issues dealing with program weaknesses and organizational effectiveness identified during the 1986 RI STI were also identified during the 1989 STI indicating that corrective actions were largely inadequate. These items have been identified for resolution in the licensee's Restart Action Plan and Nuclear Improvement Plan.

ATTACHMENT A

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
631 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

File No. RI-86-A-0080
Docket No. 50-410
50-220

11 AUG 1986

Niagara Mohawk Power Corporation
ATTN: Mr. C. V. Mangan
Senior Vice President
300 Erie Boulevard, West
Syracuse, New York 13202

Gentlemen:

Subject: Allegations by Nine Mile Point 1 Instrument and Control Technician

Enclosed is a summary of allegations made by a Nine Mile Point Unit 1 Instrument and Control Technician about activities at Unit 1 expressed to our Resident Inspector initially on July 11, 1986 and subsequently amplified in discussions with our regional staff. We understand from the individual that he has informed your staff of all but the last two concerns, items 13 and 14.

Based on discussions between our staff and you and your staff on August 6 and 7, 1986 at the Nine Mile Point site, we understand that your investigation of these concerns is nearly complete. Please provide us with a written report of the results of your investigation. This letter is being placed in the Unit 2 docket as well as the Unit 1 docket because these potentially significant allegations could impact the schedule for Unit 2 licensing.

Following your submittal of the report, we ask that you arrange to meet with us in our Region I office as soon as possible to discuss the report. We appreciate your cooperation.

Sincerely,

William F. Kane, Director
Division of Reactor Projects

Enclosures: As stated

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cc w/o encl:
Connor & Wetterhahn
John W. Keib, Esquire
J. A. Perry, Vice President, Quality Assurance
W. Hansen, Manager of Quality Assurance
D. Quamme, NMP-2 Project Director
C. Beckham, NMPC QA Manager
T. J. Perkins, General Superintendent
R. B. Abbott, Station Superintendent
T. E. Lempges, Vice President, Nuclear Generation
T. Roman, Station Superintendent
J. Alrich, Supervisor, Operations
W. Drews, Technical Superintendent
Director, Power Division
Department of Public Service, State of New York
Public Document Room (PDR)
Local Public Document Room (LPDR)
Nuclear Safety Information Center (NSIC)
NRC Resident Inspector
State of New York

bcc w/o encl:
Region I Docket Room (with concurrences)
Management Assistant, DRMA (w/o encl)
DRP Section Chief
Region I SLO
Robert J. Bores, DRSS

SUMMARY OF ALLEGATIONS

CRD Pump Vibration Testing

1. In March, 1986, after weeks of daily vibration tests of the CRD pump, testing was suspended when it was apparent that the increasing vibration would exceed the action limit of the ASME requirements and a plant shutdown would have been required prior to the scheduled March 8, 1986 shutdown.

Helium Leak Tests

2. In March, 1986, the chemistry supervisor noted that errors existed in the procedure for helium leak testing the stack gas system, in that portions of the system would not be tested. The alleger found the supervisor's conclusion to be correct. The I&C supervisor assigned the alleger to review the leak testing procedure and propose changes to it. After completing this work, the I&C supervisor sat on the proposed changes and later told the alleger to do the testing with the old procedure. The leak testing was done in April.

Feedwater Check Valve

3. The alleger was instructed to apply 100 psi air to seat the feedwater check valve after it had failed its initial test. It failed the second test also. Then the mechanic installing the replacement valve told the alleger that the valve seat was hammered in place. The valve passed the leak test, but stuck shut during startup.

4. The shift supervisor diverted flow in the feedwater lines to free the stuck feedwater check valve. There appeared to be no procedure for this and no management review. Eventually, the valve opened.

LPRMs

5. During the outage non-qualified technicians installed LPRM connectors in that A techs were installing them without direct supervision from C techs.

6. During the outage and years prior LPRMs connectors were routinely installed without proper Work Request (WR) paperwork, connectors replacements were represented on WRs as troubleshooting, and the installation and test procedure, LPRM-1, was routinely not used or filled out afterward.

7. Since the cable replacement six years ago the LPRM cables have not fit properly into the connectors. The cable dielectrics have been melted smaller (per LPRM-1) or the connector bores have been drilled larger to fit them together.

8. QC involvement in the LPRM connector work was improper in that I&C techs frequently did not inform QC that connectors were being replaced, and even when aware of the connector replacements, QC inspected only paper and never went under the vessel because they knew the work was unacceptable to specifications.

9. On July 10 a different design connector was installed on some LPRMs (prior to being discovered by the resident inspector), and no design change had been submitted for it. In addition, no work requests or LPRM maintenance procedures were prepared until after the resident inspector came down to witness this activity at which time the workers involved took a break to generate the paperwork and get it approved by the shift supervisor.

10. During the outage the alleger was harassed by fellow workers and discriminated against by his supervision due to his raising concerns about the LPRM connector work. The supervisors did little or nothing to correct his harassment.

IRMs

11. The connector on IRM 18 was replaced on June 7, 1986, and was not documented on the WR.

12. The plant was started up on the morning of June 17, 1986 based on falsified surveillance test records for the replaced IRM connector. The I&C techs and assistant supervisor falsified the test record without performing any of the required surveillance testing.

Other

13. An I&C technician working on LPRM connectors received a dose of 1.25 REM which was in excess of his administrative limit.

14. A piece of an aluminum tool about 1 inch by 8 inches was lost in the reactor vessel during the outage. The tool was used for installation and removal of feedwater line plugs.

ATTACHMENT B

8903200

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

MAR 13 1989

MEMORANDUM FOR: Robert A Capra, Director
Project Directorate I-1
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

FROM: Anthony T. Gody, Team Leader
Special Team Inspection
Nine Mile Point, Units 1 and 2

SUBJECT: SUMMARY OF SIGNIFICANT FINDINGS FROM NINE MILE POINT SPECIAL TEAM INSPECTION

Enclosed is a summary of the preliminary findings from the Nine Mile Point Special Team Inspection recently completed. This summary reflects the status of the findings as presented to the licensee at the exit meeting on March 3, 1989 and may be further modified by the review of data collected during the inspection and information provided by the licensee after the exit meeting. The final report should be issued the beginning of April 1989 and will provide a complete listing of the actual findings. This preliminary summary of findings is being provided at your request to assist you and the panel regarding the Unit 1 Restart Action Plan.

Call me on extension 49-21006 if you have any questions.

Anthony T. Gody

Anthony T. Gody, Team Leader
Special Team Inspection
Nine Mile Point Units 1 and 2

Enclosure:
As stated

cc: B. Grimes, NRR
C. Haughney, NRR

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SUMMARY OF SIGNIFICANT FINDINGS

NINE MILE POINT SPECIAL TEAM INSPECTION
JANUARY 30 - MARCH 3, 1989

OPERATIONS

1. Operators at both units were not willing to admit that they were part of the problem at Nine Mile Point.

   - "Infant Mortality" was used as an excuse at Unit 2

   - Previous SALº Category 1 standards were referenced and the recent record run used as a basis for evaluating Unit 1 performance.

2. Standards for procedure adequacy/compliance were not well established or understood by plant personnel.

   - Several conflicting documents were issued by licensee management to convey guidance on procedural compliance.

   - A source of confusion was that each department wrote their own procedures and had their own standards for compliance.

3. Communications between operators and management was strained at Unit 1.

   - Destructive criticism of training program by operators occurred with the Operations Manager present and inadequate corrective actions were taken.

   - Unit 1 operators considered the request to develop a Code of Ethics for operators unfair when they were the only group requested to do it because they felt it questioned their integrity.

TESTING

1. Poor procedure compliance/adequacy existed at both units.

   - Improper jumper/heat shield installation during Reactor Recirculation Flow Comparator Calibration at Unit 1.

   - Loss of Power (LOP)/LOCA Logic Test at Unit 2 allowed contactors to be exercised if "as found" condition was not acceptable.

   - Both technicians and operators used the checklist in the back of test procedures to perform tests without following the text of the procedure (Units 1 and 2).

   - The Reactor Recirculation Flow Comparator Setpoint of 100% ± 1% was measured by instrument with 5% graduation (Unit 1)

- Station General Order 89-01 on procedure compliance during surveillance testing was not promulgated to I&C technicians 5 days after order issuance (Unit 1).

2. Technician consciousness of material deficiencies found during testing was poor at Unit 1. The use of tape on circuit cards and over ventilation holes in drawers was considered acceptable during the Reactor Recirculation Flow comparator calibration.

3. Unit 1 work assignments were not controlled based on technicians qualifications but were left to management judgment and assessment of technician capabilities. Unit 2 had a formal program with a qualification matrix.

MAINTENANCE

1. Procedures were not adequate to control maintenance and were not effectively implemented.

   - Holes in the feet of the Unit 1 Waste Surge Tank Pump were elongated during maintenance without proper consideration as to whether this activity was a modification.

   - Replacement of a fuel pump on a Unit 2 Emergency Diesel Generator was accomplished using a handwritten procedure that did not receive the review required by the Technical Specifications and was inconsistent with the vendor manual guidance. The root cause of this problem may be that the vendor manual guidance was not suitable for use as a procedure. There were 11 other such site "generic" maintenance procedures that directed use of the vendor manuals to accomplish maintenance.

   - A broken spring found during preventive maintenance on a diesel fire pump was not adequately evaluated because technicians did not properly report the deficient condition to the control room.

2. Maintenance Training had not been effective. A new schedule for CY 1989 was a significant improvement, but still was not based on a specific needs assessment of the technicians.

3. A proactive maintenance trending program did not exist. Equipment maintenance history was reviewed annually, but the previous years' history were not considered.

DESIGN CHANGE CONTROL

1. The design control process had improved since 1987, but there still appeared to be poor control of design inputs.

2. The Site Engineering Department was not ready to support Unit 1. Several vacancies of key positions existed and functional descriptions of duties were not clearly promulgated.

3. Engineering training had not been properly implemented as documented by 5 CARs.

4. The Engineering Integration Program (Design Bases Reconstitution for Unit 1) was in a conceptual stage with no clearly established schedule for implementation.

5. Calculations for Unit 1 ATWS modification breaker and fuse coordination studies identified a problem where improper coordination could improperly isolate a remote shutdown panel and a battery switchboard. Additionally, a short service life for a key relay was identified. Neither of these concerns were identified for further corrective actions.

CORRECTIVE ACTION PROGRAMS

1. The Occurrence Report (OR) Program was not adequately controlled. Several ORs remained opened without plans for resolution. One OR concerning a hole in a Unit 2 wall was described as an unanalyzed condition, but action was slow in evaluating the condition for reportability and taking corrective actions.

2. An excessive backlog of corrective action items existed for both units and appeared to be increasing. The licensee explained this increase as the results of recent problem identification efforts.

3. Multiple, overlapping corrective action systems existed which hampered the management of problem resolution.

4. No root cause analysis or trending program existed for all problem identification sources. Existing trend programs only considered selected sources.

TRAINING

1. Training Department Goals and Objectives were promulgated during the inspection and appeared to be responsive to the RAP/NIP issues.

2. The Training Department relationship with other departments needed improvement, particularly with Unit 1 Operations. Poor plant and engineering involvement with training has detracted from the quality of training received and resulted in disruptive behavior in classrooms.

3. Training Department support of trainers appears to be effective including instructor evaluations, learning objective reviews and system approach to training (SAT) projects.

4. The Training Program evaluations being conducted were not effective. End-of-course evaluations by students were not carefully completed and were not collectively evaluated by the Training Department. Job performance evaluations of training topics were not conducted and feedback to training based on in-plant performance did not occur.

5. Management Training for new supervisors has not been taking place. This lack of timely management training could contribute to the ineffective communications with the staff and problems observed with worker-manager relations.

6. An Annual Operating Test observed by the team for Unit 1 operators did not appear to meet the requirements of 10 CFR 55.59 for a comprehensive test. The observed test was heavily weighted towards execution of EOPs. Region I was advised of this deficiency and plans to follow-up in a future inspection. The Unit 2 Annual Test appeared adequate.

QUALITY ASSURANCE PROGRAM

1. The QA Operation Surveillance Program provided good performance-based findings.

2. The QA Audit Group was understaffed and audit schedules were slipping. The team was concerned about the ability of the audit group to support RAP overview efforts with SRAB.

3. The auditor training program was weak. Recently, performance-based inspection training was conducted and nonlicensed training was being conducted for some auditors.

4. The audit group was not on distribution for LERs, ORs, or SORC and SRAB meeting minutes. This omission inhibited auditors' awareness of current issues and prevented a proactive approach to auditing plant activities.

5. The QA Department had well-defined goals and objectives as identified in the QA Business Plan. The plan was issued before the inspection began and had quantitative performance goals and specified target completion dates.

COMMITTEE ACTIVITIES

1. Members of both SORC and SRAB needed additional training and indoctrination on their review responsibilities and management's expectations. Members interviewed were weak in their knowledge of an unreviewed safety question.

2. Both committees were not fully meeting their Technical Specification (TS) review responsibilities for violations (SORC - TS violations, SRAB - all violations). Neither committee was adequately reviewing QA audit and surveillance findings.

3. For TS violations reviewed by SORC, the required report covering the recommendations to prevent recurrence was weak in identifying root causes and the action to prevent recurrence.

4. Members of SORC and SRAB were polled to take final action on issues more often than was required. This practice prevented members having interaction and discussion of the issue.

5. The independent safety engineering group (ISEG) was not effective. The group was buried too deep in the Nuclear Engineering and Licensing Department and lines of communication were not adequately established for the ISEG to identify concerns. Two ISEG members interviewed were not getting into the Unit 2 plant on a regular basis.

6. SRAB consultants were active and provided excellent input to the SRAB meetings and reviews. Nuclear Division employees on SRAB were reluctant to volunteer for new assignments involving SRAB overview of the Unit 1 RAP implementation because of their already overburdened workloads.

ORGANIZATIONAL EFFECTIVENESS

1. Long range planning has been historically poor, but new emphasis has recently been placed on this area within the Nuclear Division.

2. Previous problems were not thoroughly assessed for broad applicability. Instead, the licensee opted for a "quick fix" of problems and continued operation as before.

3. Management and employees have not been held accountable for their actions in the past, but this appeared to be a new area of emphasis within the Nuclear Division.

4. The administrative system was burdened and prevented managers from spending time in direct supervision and observation of workers.

5. Existing scheduling and performance indicator reports do not accurately measure progress or hold managers accountable.

6. There was inadequate definition of functions, responsibilities and interface agreements with the various departments in the Nuclear and Quality Assurance Divisions.

7. The NIP and RAP addressed Organizational Effectiveness Concerns, but there was no assurance that corrective actions would be implemented.

NEWMAN & HOLTZINGER, P.C.

1615 L STREET, N.W.

WASHINGTON, D.C. 20036

202 955 6600

June 13, 1990

HAND DELIVERED

Director, Division of Freedom of
Information and Publication
Services
Office of Administration
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

FREEDOM OF INFORMATION
ACT REQUEST
FOIA-90-269
Rec'd 6-18-90

Attention: Ms. Linda Robinson

Re: Freedon of Information Act Request

Dear Ms. Robinson:

Pursuant to the Freedom of Information Act (FOIA), 5 U.S.C. § 552, et seq., as supplemented by the NRC's implementing regulations, 10 C.F.R. § 9.11, et seq., we hereby request that you produce for inspection and copying the documents described in the attachments to this letter. This request primarily involves documents relating to site inspections by NRC inspectors conducted during the construction of Nine Mile Point Unit 2 (NMP-2), NRC Docket No. 50-410. Set forth in Attachment A hereto is a listing of the particular inspections for which we seek to review related documents. For each such inspection, we would like to review the following documents:

1. All documents that relate or pertain to the selection of the inspection team, including the selection of any consultants or third parties to serve as team members.

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29 pp.

2. All documents relating to the reason or reasons for conducting the inspection.

3. All documents setting forth the goals and objectives of the inspection.

4. All documents setting forth the guidelines, rules, or procedures to be followed in the inspection.

5. All documents that pertain or relate to the selection of functional areas subject to evaluation and the actual measurement of effectiveness in these areas.

6. All documents that relate or pertain to the criterion by which the overall conclusions or results of the inspection were measured.

7. All reports, evaluations, or analyses prepared by any consultant or third party in connection with the inspection.

8. All correspondence, memoranda, and other communications between the offices and divisions of the NRC, including communications to and from Region I and the Resident Inspector at NMP-2, relating or pertaining to the inspection.

9. All intra-divisional and intra-office correspondence and memoranda concerning the inspection.

10. All personal files, memoranda, and notes of each inspector identified as participating in the inspection for each inspection listed in Attachment A.

11. All personal files, memoranda, and notes of those persons identified as approving the inspection report for each inspection listed in Attachment A.

As used herein, the term "NRC" includes all offices and divisions within the Agency having any involvement with the subject matter of this request, including the NRC Regional Office for Region I, the NRC Resident Inspector's office at the NMP-2 site, and the Office of Inspection and Enforcement. As also used herein, the term "document", unless otherwise specifically limited, means all correspondence, letters, memoranda (internal and external), records of telephone conversations, notes, reports, agreements, guidelines, procedures, meeting slides, and

the like, whether in draft or final form, that are in any way relevant to the specific document descriptions.

We look forward to your response within the time limits prescribed by the regulations. We would note that in the event you consider any documents to be exempt from production, the non-exempt portions should be released. Again, we are willing to provide you with any additional information or offer any clarification you may need in processing this request. Further, given that this FOIA request is fairly extensive, we would ask that you consider releasing the documents to us in stages as you accumulate them rather than waiting until all documents subject to production have been accumulated.

As prescribed by the regulations, we agree to pay whatever charges are incurred in processing this request. Please feel free to call me at (202) 955-6790 if you have any questions concerning this matter.

Very truly yours,

John C. Person

JCP:lmd

Attachment A

NRC Site Inspections

Dates	Insp. #'s	Inspectors	Approved by
1981			
1/20 - 1/23	81.01	A. V. Varela	S. D. Ebneter
2/18 & 2/25	81.02	T. J. Jackson	R. J. Bores
4/21 - 4/23	81.03	R. A. Feil	H. B. Kister
4/22	81.04	B. H. Grier E. J. Brunner H. B. Kister S. D. Hudson R. A. Feil	E. J. Brunner
6/23 - 6/25	81.05	R. A. Feil	H. B. Kister
7/14 - 7/16	81.06	R. A. Feil	W. Baunach for H. B. Kister
7/27 - 7/31	81.07	R. Paolino A. A. Varela	L. E. Tripp for S. D. Ebneter
8/4 - 8/6	81.08	R. A. Feil	H. B. Kister
8/18 - 8/21	81.09	W. F. Sanders R. A. McBreaty S. D. Reynolds	L. E. Tripp
9/1 - 9/3	81.10	R. A. Feil R. D. Schulz	H. B. Kister
9/29 - 9/30	81.11	R. A. Feil R. D. Schulz H. B. Kister	H. B. Kister
10/13 - 11/13	81.12	R. D. Schulz	H. B. Kister
11/30 - 12/18	81.13	S. K. Chaudhary R. J. Paolino S. D. Reynolds L. E. Tripp R. D. Schulz	S. D. Ebneter
12/21/ - 1/15/82	81.14	R. D. Schulz	H. B. Kister

NEWMAN & HOLTZINGER, P. C.

NRC Site Inspections

Dates	Insp.#'s	Inspectors	Approved by
1982			
1/18 - 2/26	82.01	R. D. Schulz	H. B. Kister
3/1 - 3/26	82.02	R. D. Schulz	H. B. Kister
3/29 - 4/30	82.03	R. D. Schulz	H. B. Kister
5/11 - 5/13	82.04	A. E. Finkel	D. A. Beckman
5/10 - 6/3	82.05	R. D. Schulz	H. B. Kister
(Enforcement Conference) 6/1	82.06	R. W. Starostecki E. J. Brunner H. B. Kister R. D. Schulz	H. B. Kister
6/21 - 7/23	82.07	R. D.Schulz	H. B. Kister
7/16 (Enforcement Conference)	82.08	E. J. Brunner S. D. Ebneter D. J. Holody R. W. Starostecki R. D. Schulz	H. B. Kister
7/13 - 7/16 & 7/20	82.09	R. J. Paolino S. Richards	D. A. Beckman
7/26 - 8/27	82.10	R. D. Schulz	H. B. Kister
8/30 - 9/30	82.11	R. D. Schulz A. E. Finkel	H. B. Kister
10/12 - 11/12	82.12	R. D. Schulz	H. B. Kister
10/20 (Enforcement Conference)	82.13	R. D. Haynes D. J. Holody H. B. Kister R. B. Schulz R. W. Starostecki	H. B. Kister
11/15 - 12/22	82.14	R. D. Schultz	H. B. Kister
12/13 - 12/17	82.15	A. A. Varela R. D. Schulz	J. P. Durr
12/14 - 12/16	82.16	A. E. Finkel	C. Anderson

NEWMAN & HOLTZINGER, P. C.

NRC Site Inspections

Dates	Insp. #'s	Inspectors	Approved by
1983			
1/13 2/4	83.01	R. D. Schulz J. Grant	H. B. Kister
2/7 - 3/11	83.02	R. D. Schulz	H. B. Kister
3/1 - 3/3	83.03	A. Finkel	C. Anderson
3/14 - 4/15	83.04	R. D. Schulz	H. B. Kister
4/25 - 5/27	83.05	R. D. Schulz R. A. Gramm	H. B. Kister
5/16 - 6/1	83.06	L. R. Plisco R. D. Schulz	C. Anderson
6/13 - 6/17 & 7/13 - 8/5	83.07	R. A. Gramm	R. M. Gallo
6/7 - 6/9	83.08	A. Finkel	C. Anderson
5/23 (Management Meeting)	83.09	S. D. Ebneter R. R. Keimeg H. B. Kister R. W. Starostecki	R. R. Keimeg
7/25 - 7/29	83.10	L. Narrow E. H. Gray	J. P. Durr
8/2 - 8/4	83.11	A. Finkel R. Gramm	C. Anderson
8/8 - 9/21	83.12	R. Gramm J. Grant	R. M. Gallo
9/14	83.13	R. K. Struckmeyer R. T. Hogan	W. J. Pasciak
8/30 (Enforcement Conference)	83.14	J. A. Allan S. D. Ebneter R. M. Gallo R. A. Gramm J. M. Grant E. H. Gray D. J. Holody H. B. Kister T. Martin L. M. Narrow R. W. Starostecki	R. Gallo

NRC Site Inspections

Dates	Insp.#'s	Inspectors	Approved by
10/18 - 10/20	83.15	A. Finkel R. Gramm	C. J. Anderson
10/11 - 12/2	83.16	R. Gramm	S. Collins
12/15 - & 1/20/84	83.17	R. Gramm W. J. Lazarus	S. Collins
11/7 - 19 & 11/28 - 12/9	83.18	A. B. Beach G. B. Georgiev W. A. Hanson D. B. Osborne H. W. Philips H. J. Wong J. M. Grant Also Consultants: R. M. Compton D. C. Ford W. S. Marini E. Y. Martindale F. A. Pimentel	R. F. Heishman

NRC Site Inspections

Dates	Insp.#'s	Inspectors	Approved by
1984			
1/23 - 3/2	84.01	R. A. Gramm D. Terao	S. J. Collins
2/7 - 2/9	84.02	A. Finkel	C. J. Anderson
2/22	84.03	R. Gramm J. Allan J. Axelrad S. J. Collins J. Craig R. DeYoung S. Ebneter R. A. Gramm J. Grant J. Gutierrez D. Holody S. Hudson H. B. Kister G. Kliner W. Lazarus J. Lieberman T. Martin T. Murley R. Starostecki	S. J. Collins
4/9 - 5/11	84.06	R. A. Gramm	S. J. Collins
5/14 - 5/18	84.07	L. Narrow	J. P. Durr
4/30 - 5/25	84.08	H. W. Kerch R. H. Harris R. M. Campbell	J. P. Durr
5/14 - 6/15	84.09	R. A. Gramm S. K. Chaudhary	S. J. Collins
5/21 - 5/24	84.10	R. J. Bailey J. M. Dunlap	R. R. Keimeg
6/18 - 7/27	84.11	R. A. Gramm A. C. Cerne J. M. Grant	S. J. Collins
7/30 - 9/6	84.13	R. A. Gramm	S. J. Collins
9/10 - 11/2	84.15	R. A. Gramm	S. J. Collins
10/29 - 11/2	84.16	R. L. Nimitz	W. J. Pasciak

NRC Site Inspections

Dates	Insp. #'s	Inspectors	Approved by
10/29 - 11/2	84.17	L. Narrow	J. P. Durr
12/3 - 12/14	84.18	J. P. Durr A. E. Finkel R. A. Gramm R. H. Harris H. W. Kerch K. A. Manoly G. Napuda J. H. Raval S. D. Reynolds	S. D. Ebneter
11/5 - 12/21	84.19	R. A. Gramm R. M. Wheeler	W. J. Lazarus
11/14	84.20	R. A. Gramm S. D. Hudson	W. J. Lazarus
12/24 - 2/1/85	84.21	R. A. Gramm R. M. Wheeler	W. J. Lazarus

NRC Site Inspections

Dates	Insp. #'s	Inspectors	Approved by
1985			
1/15 - 1/18	85.01	L. Briggs S. Hudson R. Gramm R. Wheeler	L. Bettenhausen
1/28 - 2/1	85.02	S. D. Reynolds R. Gramm R. Wheeler	J. Durr
2/11 - 2/15	85.03	R. Paolino C. Woodard A. Varela R. Gramm	C. Anderson
2/4 - 3/18	85.04	R. A. Gramm R. M. Wheeler	J. C. Linville
2/6	85.05	R. A. Gramm	W. J. Lazarus
3/4 - 3/8	85.06	G. Napuda K. A. Manoly H. Van Kessel R. Gramm S. Hudson R. Wheeler	P. K. Eapen
3/18 - 3/22	85.08	A. Finkel L Cheung C Woodard S. Ebneter R. Gramm	C. J. Anderson
2/15 & 3/15	85.09	R. A. Gramm J. C. Linville S. C. Ebneter S. J. Collins	J. C. Linville
3/19 - 4/26	85.10	R. A. Gramm S. D. Hudson R. M. Wheeler A. J. Luptak H. W. Kerch	J. C. Linville

NRC Site Inspections

Dates	Insp. #'s	Inspectors	Approved by
4/2 - 4/4 & 4/9 - 4/12	85.11	H. I. Gregg A. Kortas R. Gramm S. Hudson J. Linville R. Wheeler A. Luptak	J. T. Wiggins
5/6 - 5/10	85.12	A. Finkel	C. J. Anderson
4/29 - 6/7	85.13	A. Gramm G. A. Walton R. M. Wheeler	J. C. Linville
6/11 - 6/19	85.15	R. Keller D. Lange F. Crescenzo J. Berry W. Cliff G. Sly	H. Kister
5/28 - 5/31	85.16	R. A. McBrearty R. A. Gramm R. M. Wheeler	J. T. Wiggins
6/10 - 6/14	85.17	F. Paulitz R. A. Gramm R. Wheeler	C. J. Anderson
5/21 - 5/24	85.18	G. S. Lewis E. V. Imbro J. L. Milhoan G. T. Ankrum S. C. Ebneter B. K. Grimes	J. L. Milhoan
6/10 - 7/19	85.19	R. A. Gramm R. M. Wheeler	J. C. Linville
6/24 - 6/28	85.20	R. L. Nimitz M. J. Cioffi L. E. Meyers S. Hudson R. Gramm	W. J. Pascak

NRC Site Inspections

Dates	Insp.#'s	Inspectors	Approved by
6/17 (Management Conference)	85.21	S. J. Collins J. P. Durr S. D. Ebneter R. A. Gramm J. Linville K. Manoly T. Murley R. W. Starostecki J. Wiggins H. J. Wong	J. C. Linville
7/16 - 7/19	85.23	R. A. McBrearty R. A. Gramm	J. T. Wiggins
7/22 - 7/26	85.24	A. A. Varela R. A. Gramm	J. T. Wiggins
7/22 - 8/30	85.25	R. A. Gramm	J. C. Linville
7/23 (Management Conference)	85.26	J. P. Durr R. W. Eselgroth R. A. Gramm J. Linville T. Murley R. W. Starostecki	J. C. Linville
9/9 - 1/18/86	85.27	L. T. Doerflein R. A. Gramm J. M. Grant S. D. Hudson J. P. Rogers	J. C. Linville
8/12 - 8/16	85.28	G. S. Lewis E. V. Imbro J. L. Milhoan G. T. Ankrum S. E. Ebneter B. K. Grimes	J. L. Milhoan
9/30 - 10/4	85.29	E. H. Gray	J. T. Wiggins
9/9 - 9/13	85.30	L. Briggs L. Doerflein R. Gramm S. Hudson	P. Eselgroth
10/7 - 10/11	85.31	K. A. Manoly R. M. Campbell R. A. Gramm	J. T. Wiggins

NRC Site Inspections

Dates	Insp. #'s	Inspectors	Approved by
10/14 - 10/18	85.32	R. L. Nimitz S. Hudson R. Gramm	W. T. Pasciak
10/21 - 10/25	85.33	H. I. Gregg R. Gramm	J. T. Wiggins
10/21 - 10/25	85.34	A. G. Krasopoulos D. Kubicki A. Coppola K. Parkinson R. Gramm	C. J. Anderson
10/28 - 11/1	85.35	C. H. Woodard L. Doerflein	G. Anderson
10/21 - 11/26	85.36	R. A. Gramm L. T. Doerflein S. D. Hudson	J. C. Linville
10/28 - 11/1	85.37	S. D. Hudson G. S. Marshall P. H. Bissett F. J. Crescenzo D. J. Lange	J. C. Linville
5/21 - 5/24	85.38	J. M. Dunlap R. R. Keimeg Joyner Martin	R. R. Keimeg
11/25 - 11/27	85.40	A. Della Rattan R. R. Keimeg Joyner Martin	R. R. Keimeg
12/10 - 12/19	85.41	D. Lange R. Keller F. Crescenzo A. Howe B. Hajek G. Sly W. Cliff L. Miller	H. Kister
11/12 - 11/15	85.42	R. J. Paolino R. A. Gramm	C. J. Anderson

NEWMAN & HOLTZINGER, P.C.

NRC Site Inspections

Dates	Insp.#'s	Inspectors	Approved by
11/25 - 12/5 & 12/9 - 12/19	85.43	H. W. Kerch R. H. Harris R. M. Campbell R. Gramm	J. T. Wiggins
12/2 - 1/10/86	85.44	L. T. Doerflein R. A. Gramm S. D. Hudson H. W. Kerch	J. C. Linville
12/9 - 12/10	85.45	A. Krasopoulos	C. Anderson
12/9 - 12/12	85.46	R. A. McBrearty	J. T. Wiggins
12/16 - 12/20	85.47	R. L. Nimitz S. Hudson R. Gramm	M. Shanbaky

NRC Site Inspections

Dates	Insp. #'s	Inspectors	Approved by
1986			
1/13 - 2/21	86.01	L. T. Doerflein R. A. Gramm S. D. Hudson M. Miller R. Paolino	J. C. Linville
1/6 - 1/17	86.02	J. Linville R. Gramm S. Hudson L. Doerflein	Parameter, Inc.
1/21 - 1/24	86.03	L. Briggs	P. Eselgroth
1/27 - 1/31	86.04	J. C. Linville R. Paolino L. Derflein A. Cerne J. Isom	J. C. Linville
3/3 - 3/7	86.05	L. Briggs R. Gramm S. Hudson	P. Eselgroth
1/22	86.06	R. A. Gram	J. C. Linville
1/3 & 1/7 Project Audit #50 & C/A I.R.	86.07	NRC Audit Team (No names mentioned) Report prepared by Report approved by	 E. V. Imbro G. T. Ankrum
3/3 - 3/7	86.08	F. Paulitz L. Cheung R. Gramm S. Hudson	C. J. Anderson
2/22 - 4/18	86.09	R. A. Gramm S. D. Hudson G. W. Meyer J. R. Stair	J. C. Linville
3/31 - 4/4	86.11	G. Napuda J. Gilray W. Oliveira S. Hudson R. Gramm	P. K. Eapen

NEWMAN & HOLTZINGER, P.C.

NRC Site Inspections

Dates	Insp. #'s	Inspectors	Approved by:
4/14 - 4/25	86.13	K. Manoly S. Chaudhary A. Lodewyk J. Hunter G. Woodard F. Paulitz R. A. Gramm M. V. Johnston	J. Wiggins
3/31 - 4/4	86.14	M. Evans	P. Eselgroth
4/7 - 4/11 & 4/21 - 4/25	86.15	C. Petrone L. Briggs M. Dev R. Gramm S. Kucharski S. Hudson	J. Johnson
4/7 - 4/15	86.16	S. Kucharski R. Gramm S. Hudson C. Petrone	C. Anderson
4/28 - 5/1	86.17	J. J. Kottan M. E. Kramaric	W. J. Pasciak
4/19 - 5/31	86.18	W. A. Cook R. A. Gramm H. W. Kerch A. J. Lodewyk A. J. Luptak C. S. Marschall G. W. Meyer J. R. Stair	J. C. Linville
5/19	86.19	R. L. Nimitz M. Kaminski	M. Shanbaky
5/5 - 5/9	86.20	L. Briggs D. Florek R. Gramm J. Hunter J. Stair	P. Eselgroth
5/12 - 5/15	86.21	A. Krasopoulos H. Kerch R. Gramm J. Stair C. Marshall	C. Anderson

NRC Site Inspections

Dates	Insp. #'s	Inspectors	Approved by
4/30 - 5/9	86.22	R. W. Winters J. G. Hunter R. A. Gramm J. Stair	P. K. Eapen
5/19 - 5/20	86.23	C. Gordon B. Haagensen C. Hawley A. Smith	W. Lazarus
5/12 - 5/16	86.24	W. G. Martin G. C. Smith	R. R. Keimeg
5/20 - 5/23	86.26	C. Petrone A. Finkel R. Gramm	J. Johnson
5/19 - 5/23	86.27	M. Evans R. Gramm A. Finkel C. Petrone	P. Eselgroth
5/27 - 6/13	86.28	C. H. Woodard H. I. Gregg N. J. Butler R. A. Gramm	C. J. Anderson
6/1 - 7/13	86.29	W. A. Cook R. A. Gramm J. C. Linville G. W. Meyer J. R. Stair	J. C. Linville
6/2 - 6/6	86.30	L. Briggs W. Cook R. Gramm J. Stair	P. Eselgroth
6/16 - 6/27	86.31	L. Briggs M. Evans R. Brady R. Gramm	P. Eselgroth
6/23 - 6/25	86.32	E. H. Gray	J. T. Wiggins
6/30 - 7/11	86.33	L. Briggs M. Evans W. Cook R. Gramm	P. Eselgroth

NRC Site Inspections

Dates	Insp. #'s	Inspectors	Approved by
7/7 - 7/11	86.35	J. J. Kottan K. K. Rabatin	W. J. Pasciak
7/7 - 7/11	86.36	J. A. Prell M. Evans J. Kottan K. Rabatin	J. Johnson
7/14 - 7/18 7/28 - 8/1 8/11 - 8/15	86.37	T. Koshy C. Woodward J. Paolino L. S. Cheung	C. J. Anderson
7/14 - 7/24	86.38	D. Florek M. Evans E. Vanterpool W. Cook	P. Eselgroth
7/7 - 8/31	86.39	W. A. Cook R. A. Gramm C. S. Marschall G. W. Meyer W. L. Schmidt	J. C. Linville
7/28 - 8/1	86.40	W. G. Martin	R. R. Keimeg
7/29 - 8/1	86.41	D. Florek J. Golla W. Cook T. Koshy R. McBrearty W. Schmidt C. Woodard	P. Eselgroth
9/1 - 9/30	86.42	W. A. Cook C. S. Marschall G. W. Meyer R. L. Nimitz W. L. Schmidt	J. C. Linville
7/28 - 8/1	86.43	R. A. McBrearty W. Cook W. Schmidt	J. T. Wiggins
8/4 - 8/6	86.44	W. Thomas C. Conklin	W. Lazarus
7/21 - 7/25	86.45	R. Struckmeyer M. Krammaric	W. Pasciak

NRC Site Inspections

Dates	Insp.#'s	Inspectors	Approved by
8/4 - 8/7	86.46	R. L. Nimitz S. Sherbini	M. Shanbak
8/4 - 8/8	86.47	S. K. Chaudhary W. A. Cook	J. Johnson
8/11 - 8/15	86.48	W. Oliveri R. W. Winters	Dr. P. K. Eapen
8/18 - 8/22	86.49	R. K. Struckmeyer M. E. Kramaric	W. J. Pasciak
8/18 - 8/28	86.50	L. Briggs D. Florek M. Evans	P. Eselgroth
9/8 - 9/19	86.51	D. Florek M. Evans	L. Briggs
8/26 - 8/28 & 9/8 - 9/12	86.52	J. C. Linville Dr. P. K. Eapen R. Gramm J. Stair	R. M. Gallo
9/22 - 9/26	86.53	H. I. Gregg	J. R.Strosnider
9/20 - 10/2	86.54	J. Hawxhurst	W. Lazarus
10/7 - 10/9	86.55	H. Zibulsky	W. J. Pasciak
10/1 - 11/16	86. 6	W. A. Cook P. K. Eapen J. E. Kaucher C. S. Marschall W. L. Schmidt C. H. Woodard	J. C. Linville
10/20 - 10/24	86.57	D. Florek M. Evans	L. Briggs
10/27 - 10/29	86.58	J. Hawxhurst W. Cook S. Merwin M. Moeller F. Victor M. Clausen J. Kaucher W. Schmidt C. Marshall	W. Lazarus

NRC Site Inspections

Dates	Insp.#'s	Inspectors	Approved by
10/31 - 11/5	86.60	M. Evans	D. Florek
8/25 - 8/29	86.61	S. Kucharski E. Kelly C. Marschall G. Napuda R. Paolino W. Raymond R. Mutakas S. Collins	W. Kane
11/12	86.62	J. C. Linville Eselgroth S. C. Collins Kane Allan Morley	
11/17 - 11/21	86.63	R. L. Nimitz	M. M. Shanbaky
11/17 - 11/21	86.64	M. Evans	D. Florek
11/17 - 1/4/87	86.65	W. A. Cook C. S. Marschall G. W. Meyer W. L. Schmidt J. C. Linville	J. E. Kaucher
11/17 - 1/4/87	86.66	W. A. Cook J. E. Kaucher C. S. Marschall G. W. Mayer W. L. Schmidt	J. C. Linville
12/1 -12/5	86.67	H. I. Gregg W. Cook W. Schmidt	J. R. Strosnider
12/8 - 12/12	86.68	M. Evans W. Cook W. Schmidt	C. Petrone

NRC Site Inspections

Dates	Insp.#'s	Inspectors	Approved by
1987			
1/4 - 3/1	87.02	W. A. Cook C. S. Marschall W. L. Schmidt G. Mayer	J. C. Linville
1/12 - 1/28	87.03	H. I. Gregg	J. R. Strosnider
1/12 - 1/16	87.04	D. LeQuia W. Cook C. Marschall W. Schmidt	M. Shanbaky
2/2 - 2/5	87.05	F. Paulitz W. Cook W. Schmidt C. Marschall	C. J. Anderson
2/10 - 2/13	87.06	M. Evans L. Wink W. Cook C. Marschall W. Schidt	P. Eselgroth
2/9 - 2/13	87.07	A. Finkel W. Cook C. Marschall W. Schmidt	N. Blumberg
4/20 - 6/7	87.08	W. A. Cook C. S. Marshall R. L. Nimitz W. L. Schmidt	J. R. Johnson
3/2 - 4/19	87.09	W. H. Bateman W. A. Cook D. J. Lange C. S. Marschall W. L. Schmidt	J. R. Johnson
4/6 - 4/10	87.10	W. G. Martin	R. I. Keimeg
3/23 - 3/27	87.11	H. I. Gregg W. Cook	J. R. Strosnider

NEWMAN & HOLTZINGER, P.C.

NRC Site Inspections

Dates	Insp.#'s	Inspectors	Approved by
3/23 - 3/27	87.12	L. Cheung C. Marschall W. Schmidt	C. J. Anderson
4/20 - 4/21	87.13	A. Krasopoulos	C. J. Anderson
4/13 - 4/17	87.14	H. I. Gregg	J. R. Strosnider
5/11 - 5/15	87.15	L. J. Wink W. Cook W. Schmidt	D. Florek
6/1 - 6/12	87.16	M. McBride C. Warren A. Luptak L. Wink D. Lange N. Perry M. Fairtile D. Beckman B. Jorgensen R. Nimitz J. Johnson	R. Gallo
5/19 - 5/29	87.17	M. Evans D. Florek W. Cook C. Marschall W. Schmidt	P. Eselgroth
6/10 - 6/11	87.19	W. Martin W. Lancaster	R. Keimeg
6/8 - 7/19	87.20	W. Cook C. Marschall W. Schmidt N. Perry G. Meyer R. Nimitz	J. R. Johnson
6/8 - 6/19	87.21	M. Evans L. Wink W. Cook C. Marschall W. Schmidt	P. Eselgroth

NRC Site Inspections

Dates	Insp.#'s	Inspectors	Approved by
6/22 - 6/26 & 6/30 - 7/1	87.22	R. Nimitz H. Bicehouse C. Woodard W. Cook W. Schmidt C. Marschall	M. Shanbaky
6/22 - 6/30	87.23	M. Evans L. Wink W. Cook N. Perry W. Schmidt	P. Eselgroth
8/3 - 8/7	87.24	R. Stock[illegible]yer A.	W. Pasciak
6/29 - 6/30 7/6 - 7/10	87.25	[illegible]erch R. Gramm B. Cook	E. Gray
7/6 -7/10	87.26	M. Evans W. Cook C. Marschall W. Schmidt	P. Eselgroth
8/3 - 8/12	87.27	L. Wink D. Florek W. Cook C. Marschall N. Perry W. Schmidt	P. Eselgroth
7/20 -7/24	87.28	L. Wink W. Cook C. Marschall W. Schmidt	P. Eselgroth
7/20 - 8/30	87.29	W. Cook C. Marschall W. Schmidt N. Perry	J. Johnson
7/27 - 7/31	87.30	W. Martin W. Cook	R. Keimeg

NRC Site Inspections

Dates	Insp.#'s	Inspectors	Approved by
8/25 - 8/27	87.31	T. Tuccinaret B. Fox C. Conklin W. Thomas G. Stoetzel W. Cook C. Marschall W. Schmidt	W. Lazarus
9/1 - 9/8	87.32	W. Cook C. Marschall W. Schmidt	J. Johnson
8/24 - 8/28	87.33	W. Cook C. Marschall W. Schimdt	D. Florek
8/24 - 8/27	87.34	R. Nimitz M. Markley C. Marschall	M. Shanbaky
9/21 - 9/23 & 10/5 - 10/9	87.35	L. Wink W. Cook C. Marschall W. Schmidt	D. Lange
9/14 - 9/18	87.36	B. Davidson W. Schmidt	W. Pasciak
8/31 - 10/4	87.37	W. Cook C. Marschall W. Schmidt	J. Johnson
10/12 - 10/15	87.38	L. Wink W. Cook C. Marschall W. Schmidt	D. Lange
10/5 - 10/30	87.39	W. Cook C. Marschall W. Schmidt H. Kerch	J. Johnson
10/19 - 10/22	87.40	N. Perry G. Meyer W. Cook W. Schmidt	J. Johnson

NRC Site Inspections

Dates	Insp.#'s	Inspectors	Approved by
11/2 - 11/6	87.41	L. Wink G. Meyer W. Schmidt	D. Lange
10/31 - 12/10	87.42	W. Cook W. Schmidt G. Meyer E. Gray	J. Johnson
12/11	87.45	W. Cook C. Marschall W. Schmidt D. Florek A. Krasopoulos T. Lumb G. Meyer D. Persinko	J. Johnson

NRC Site Inspections

Dates	Insp. #'s	Inspectors	Approved by
1988			
1/21 - 1/24/	88.01	E. Wenzinger M. Haughey A. Howe L. Lois H. Ornstein	E. Wenzinger
2/1 - 3/31	88.02	W. Cook A. Krasopoulos R. Laura G. Meyer R. Plasse W. Schmidt	J. Johnson
1/25 - 1/29	88.03	T. Lumb W. Cook W. Schmidt	D. Lange
2/24 - 2/26	88.04	D. Florek T. Lumb C. Sisco W. Cook	D. Lange
2/15 - 2/19	88.05	R. Nimitz M. Cook	N. Shanbaky
2/29 - 3/4 & 3/21 - 3/25	88.06	M. Dev R. Temps W. Oliveri L. Prividy T. Rebelowski G. Napuda W. Cook R. Gallo K. Hook J. Johnson R. Laura W. Schmidt	R. Gallo
4/1 - 5/5	88.07	W. Cook A. Krasopoulos R. Laura W. Schmidt	J. Johnson
4/18 - 4/22	88.08	L. Cheung S. Alexander E. Claiborne W. Carpenter G. Decker	C. Anderson

NRC Site Inspections

Dates	Insp. #'s	Inspectors	Approved by
3/7 - 3/11 & 4/4 - 4/8	88.09	R. A. McBrearty J. Strosnider H. Kerch R. Harris M. Oliveri W. Cook W. Schmidt	J. R. Strosnider
4/4 - 4/8	88.10	W. Oliveri W. Cook	N. Blumberg
4/11 - 4/15	88.11	R. Paolino C. Anderson R. Benedict L. Cheung D. Caphton W. Cook J. Durr M. Haughey R. Gallo F. Hawkins J. Johnson P. Kelley	C. Anderson
4/18 - 4/22	88.12	R. Loesch R. Nimitz W. Cook	M. Shanbaky
4/25 - 4/29	88.13	A. Kirkwood J. Cottan	W. Pasciak
6/6 - 6/10	88.14	M. Evans W. Cook W. Schmidt	D. Lange
5/6 - 5/24	88.15	W. Cook W. Schmidt A. Krasopoulos	J. Johnson
5/25 - 7/6	88.16	W. Cook W. Schmidt R. Temps A. Krasopoulos	J. Johnson

NEWMAN & HOLTZINGER, P.C.

NRC Site Inspections

Dates	Insp.#'s	Inspectors	Approved by
7/7 - 8/24	88.17	W. A. Cook W. L. Schmidt R. R. Temps R. A. Laura M. F. Haughey	J. R. Johnson
8/25 - 11/3	88.18	W. Cook W. Schmidt R. Temps M. Banerjee A. Howe	J. R. Johnson
10/4 - 11/17	88.19	W. A. Cook W. L. Schmidt R. R. Temps R. A. Plasse M. Banerjee R. A. Laura H. I. Gregg A. G. Krasopoulos	J. R. Johnson
11/18 - 1/6/89	88.20	W. A. Cook R. R. Temps R. A. Laura R. S. Barkley J. E. Carrasco J. R. Johnson	J. R. Johnson
12/3 - 12/21	88.21	W. A. Cook R. A. Laura	J. R. Johnson
6/13 - 6/17	88.22	H. Gregg W. Cook A. Krasopoulos W. Schmidt	P. Eapen
6/20 - 6/24	88.23	R. Evans W. Hansen G. Lapinsky W. Schmidt C. Sisco A. Sutthoff D. Florek	R. Gallo
8/1 - 8/4	88.24	B. Fox G. Martin K. McBridge G. Arthur	W. Lazarus

NRC Site Inspections

Dates	Insp.#'s	Inspectors	Approved by
8/1 - 8/3	88.25	E. Fox W. Schmidt G. Smith R. Temps	W. Lazarus
7/25 - 7/29	88.26	T. Kosky R. Mathew R. Temps W. Schmidt	C. Anderson
8/1 - 8/5	88.27	R. Loesch A. Weadock W. Schmidt R. Temps	M. Shanbaky
8/22 - 8/26	88.28	J. Jang	W. Pasciak
9/26 - 9/30	88.29	W. Tobin D. Cameron W. Schmidt	R. Keimeg
11/14 - 11/18	88.30	D. L. Caphton	N. J. Blumberg
10/3 - 10/7	88.31	R. Loesch	M. Shanbaky
11/14 - 11/18	88.32	R. J. Paolino Also NRC Contractors A. C. Udy - INEL R. VanderBeek - INEL	R. K. Mathew C. J. Anderson
11/28 - 12/2	88.33	B. Davidson J. Furia R. Temps R. Laura	W. Pasciak
8/17 - 8/19	88.201	J. Jacobson T. Silko W. Schmidt	E. Brach