NIAGARA MOHAWK NUCLEAR SBU

NINE MILE POINT UNIT 1

SPECIAL TEAM INVESTIGATION REPORT

OCTOBER 31, 1992

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UNIT 1 SPECIAL TEAM INVESTIGATION REPORT

1. <u>PURPOSE</u>:

investigate an event that was not properly brought to Senior Management's attention. Understand what happened and why it was not reported promptly.

2. <u>EVENT</u>:

On , from to neither the Station Shift Supervisor (SSS) or the Assistant SSS were present in the Nine Mile Point Unit 1 Control Room. This is a violation of Technical Specifications Section 6.2.2.e that states that "A licensed SRO shall be required in the Control Room during power operations, hot shutdown, and when the Emergency Plan is activated". The licensed SROs were the on-shift SSS and ASSS.

3. <u>CONCERN</u>:

Why the above event was not brought to upper management's attention (i.e. Plant Manager and Vice President - Nuclear Generation and above) until

4. <u>SCOPE</u>:

The investigation included the specific event as well as the delay in reporting, to determine if this was an isolated instance, or if there might be other instances of similar circumstances. Although the event involved Unit 1, records were reviewed to assure a similar event had not occurred at Unit 2.

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5. EXECUTIVE SUMMARY:

The Special Team Investigation involved interviews of operating crews at Unit 1 plus members of Nuclear Generation management up to the Vice President. The investigation addressed a review and evaluation of security access logs for entry and exiting both Unit 1 and Unit 2 Control Rooms over a two-month period. In addition, a review and analysis of Unit 1 1992 LERs and DERs related to operator errors was conducted as part of this investigation.

The investigation team confirmed that the Technical Specification Section 6.2.2.e was in fact violated on from to (5 minutes) because there was no on-shift active Senior Reactor Operator (SRO) present in the Unit 1 Control. Based on the results of the Unit 1 and Unit 2 security transaction logs described in this report, the particular event of 10/9/92 was an isolated incident. No other discrepancies were identified.

Upon return to the Control Room, the on-shift SSS failed to properly evaluate Technical Specification Section 6.2.2.e and as a result did not document and report the event in accordance with station procedure. This is unacceptable performance.

The on-shift license personnel, and in particular the SSS, collectively failed to demonstrate a conservative operating philosophy by not checking the Technical Specification for specific requirements, not making any note in a log or drafting a DER. Based on the crew's response to this incident additional management attention is required to implement a conservative approach to plant operations.

The most probable cause of the on-shift SSS's failure to properly evaluate Technical Specification Section 6.2.2.e was his narrow focus on completing and closing the LCO on the Reactor Building Emergency Ventilation System to the exclusion of other matters. This is clearly unacceptable performance.

There was a breakdown in timely reporting of the event up the chain of command due to the SSS being less forthcoming in conversation with his crew members and his supervisor, and a lack of a more questioning attitude on the part of the staff SRO, on-shift STA, ASSS and Acting General Supervisor of Operations. As a result, no log entry was made and no DER was drafted on the date of the event It is noteworthy that represented employees persisted in pursuing the matter. Follow-up by represented licensed operators occurred after they felt enough time had elapsed for management action and not seeing any action, they raised the question up the chain of command. This received the immediate attention of management. •

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Uncertainty exists regarding specific Shift Technical Advisor (STA) roles, responsibilities and relationships with operating crews in spite of the fact that a dedicated STA has been on-shift for almost a year. More effective use of the STA could have prevented the failure of not reporting this event in a timely manner had the SSS had the STA research the Technical Specification requirements and document the event on a DER.

There were no adverse safety consequences as a result of this event. The plant remained at 99 percent power with no challenges to safety during this five (5) minute event. However, this event, coupled with some other Unit 1 recent events such as 1st stage bowl pressure, loss of ultimate heat sink incident, and APRM/IRM being bypassed, indicate we have not been completely effective regarding putting into practice a questioning attitude, checking requirements, initiating DERs promptly, and accurately reporting and communicating up and down the chain of command. This demonstrates a failure on management's part to effectively implement past corrective actions to preclude recurrences.

The investigation revealed no evidence of any deliberate conspiracy or cover-up.

Section 10 of this report summarizes the specific team recommendations. Included among them are:

- Remove the SSS (on shift during the incident) from license duties.
- Have Operations Management promptly review results, conclusions, and lessons learned regarding this investigation with operating crews.
- As lessons learned from this incident, clearly communicate and discuss the importance and seriousness of implementing the following practices:
 - Apply Stop, Think, Ask, Act, Review (STAAR) to everything we do
 - When a requirement is questioned <u>always</u> look it up to get facts - don't guess.
 - If not sure on an event, document event in log and initiate DER immediately to let process work regarding operability, reportability, informing Plant Manager and proceeding with required actions.
- Clarify current management expectations of when they expect to be notified of a problem.

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6. <u>APPROACH USED IN CONDUCTING INVESTIGATION:</u>

The investigation consisted of a three-prong approach. The main effort involved four teams of two individuals on each team interviewing members of the operating crews at Nine Mile Point Unit 1. The team members were selected based on their diverse background to conduct such a review. Appendix A covers the team members and their backgrounds. The second effort involved a review of key card data from the Security Department on any entries to and exits from the Unit 1 and Unit 2 Control Rooms over a two-month period from covering the 24-hour day. The third to effort involved a review and analysis of the Licensee Event Reports issued since January 1, 1992 related to Nine Mile Point Unit 1 to determine if there is any pattern of similar events. In addition a review was performed of the Deviation Event Reports issued from January 1, 1992 related to Operations Personnel at Unit 1. Of the DERs that were written during that period, those related to personnel errors and Technical Specification violations were reviewed to determine if there might be a trend.

7. <u>SUMMARY OF EVENT SEQUENCE INCLUDING TWO DELAYS</u>:

On the date of the event,theshift crew wasworking theshift in the plant. Theshift crew was workingand thecrew was working theReferto Appendix B for the Unit 1 shift crews schedule fromto

NOTE: Times listed are in many cases approximate

TIME DATE EVENT

The ASSS exited the Control Room to perform a Plant Tour.

Staff SRO was talking to SSS. SSS appeared to be ready to leave Control Room. Staff SRO asked where are you going? SSS stopped, did not exit Control Room.

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TIME DATE EVENT

The SSS exited the Control Room to obtain information from the Planning Meeting. No active SRO was present in the Control Room. This violated Technical Specification 6.2.2.e.

NOTE: The SSS stated (in interviews) that he forgot the ASSS was not in the Control Room.

NOTE: Two Reactor Operators (ROs), and the Shift Technical Advisor (STA) were in the Control Room. The Acting General Supervisor Operations (inactive SRO) was also present in the Control Room working in his office on other matters.

NOTE: The SSS was concerned with clearing a 7-day LCO (two days into the 7 days) and with a problem associated with the Main Unit 1 Transformer (annunciator associated with abnormal transformer pressure).

The Staff SRO entered the Control Room looking for the SSS. He did not find the SSS or ASSS. At about he advised the STA that there was no SRO in the Control Room.

The STA attempted to contact the SSS on the Gaitronics system. The SSS entered the Control Room at this time.

The STA mentioned to the SSS that the Control Room had been left with no SRO present and questioned whether the incident was a technical specification violation.

NOTE: The STA did not consult Technical Specifications.

NOTE: SSS rationalized it away. He thought he was gone for about 30 seconds and felt there was no impact on the plant.

NOTE: SSS did not consult Technical Specifications.

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TIME DATE EVENT

The SSS indicated in passing to the Acting General Supervisor Operations, as he (the Acting General Supervisor Operations) was leaving the Control Room, that he had punched out and right back in.

NOTE: SSS did not provide details or discuss a violation of Technical Specification and possible reportability of the incident to the Acting General Supervisor Operations.

The Acting General Supervisor did not think there was a problem based on what the SSS said to him. The Acting General Supervisor exited the Control Room.

The Shift RO questioned the SSS on whether this incident was a violation of Technical Specifications. The SSS indicated that he had mentioned it to the Acting General Supervisor Operations and that no problem was indicated.

NOTE: Neither the SSS or the Shift RO consulted Technical Specifications.

NOTE: No Deviation Event Report (DER) was initiated due to the SSS concluding that no problem existed.

ASSS returned to the Control Room from Plant Tour. The STA informed the ASSS that for a brief period no SRO was present in the Control Room during his plant tour. He also informed the ASSS that the SSS discussed this with the Acting General Supervisor Operations and that no problem was indicated.

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This was the final day of Shift for the involved shift crew. Refer to Appendix B for the schedule. Following the the shift crew began their training cycle at the Nuclear Training Center the following No further discussions of this event involving Operations management occurred until

TIME DATE EVENT

A represented employee contacted the General Supervisor Operations at home by phone and informed him of the incident and that apparently nothing was being done about it. Over a series of phone calls, the represented employee indicated that he discussed this incident with the On Duty SSS and both agreed that the General Supervisor Operations should be informed.

General Supervisor Operations contacted the On-Duty SSS to have personnel on the involved shift crew report to the G-2 Conference Room at the following morning.

General Supervisor Operations contacted the Operations Manager informing him of a potential Technical Specification violation and plans for a fact finding meeting the following morning. Regarding informing the Plant Manager of the event, it was agreed to wait until the results of the fact finding meeting to confirm if a problem indeed existed.

General Supervisor Operations conducted the Fact Finding, Accountability Meeting in G-2 Conference Room. This was followed by a series of one-on-one interviews. It was revealed that a violation of Technical Specifications Section 6.2.2.e did in fact occur. At the conclusion of these meetings at about 1100, a DER was initiated. A copy of the DER is contained in Appendix E.

Operations Manager advised the Plant Manager that a potential Technical Specification violation may have occurred, and that he wanted to personally verify details and provide a full report later (following Fact Finding Meeting).

NOTE: The Plant Manager and Operations Manager attended the Hay Compensation Meeting from 0930 to 1200 following the 0845 Plant Manager's morning meeting.

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TIME DATE

EVENT

General Supervisor Operations presented results of the Fact Finding Meeting to the Operations Manager upon his return to his office. The DER on the event was presented at the time.

Operations Manager presented the DER and results of fact finding meeting held by General Supervisor Operations to the Plant Manager.

Vice President - Nuclear Generation was briefed of incident by Plant Manager, Operations Manager, General Supervisor Operations and Acting General Supervisor Operations.

Plant Manager briefed the Senior NRC Resident Inspector on the incident.

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8. <u>RESULTS OF INVESTIGATION:</u>

A. SUMMARY OF INTERVIEWS RESULTS

A total of fifty-eight interviews were conducted, including shift crew members from shift crews through and Relief, members of Operations management, Operation Training, Unit 1 Plant Manager and the Vice President Nuclear Generation. These interviews were conducted over the period from

to A representative sample of questions asked of operations crew members is included for information as Appendix C.

During the conduct of the interviews, a Flow Chart Time-Line was developed and updated reflecting a sequence of events, actions, contributing factors, conditions, changes and consequences. Appendix D contains the resultant Flow Chart Time-Line as it relates to the SRO not being present in the Unit 1 Control Room, including the delays in reporting to Plant Management.

There was no evidence that management or the crew deliberately tried to cover up the event. Section 7 of this report reflects a summary of events in sequence that the investigation team used, in part, to draw its' conclusions. There was a breakdown in timely reporting of the event up the chain of command due to the SSS being less forthcoming on conversation with his crew members and his supervisor, and a lack of a more questioning attitude on the part of the staff SRO, on-shift STA, ASSS and Acting General Supervisor of Operation. Initially the crew involved feit management was dealing with the issue. The SSS felt that it was not an issue and was not pursuing it further. There is no indication that the crews feared management's response to the event. On the contrary it was felt by crew personnel that not reporting an event would be dealt with strongly. Several represented personnel expressed concern about the extent of discipline from the operator rounds issue and how that applied when a management person was involved. There was no indication that the operator rounds issue had any effect on the reporting of this incident to management.

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There was no clear evidence indicated by the interviewing process that a conspiracy of silence exists at Nine Mile Point Unit 1 concerning this issue. On the contrary, the concern was communicated up through the Chain of Command by a licensed, represented employee when it was felt that the issue was not being adequately addressed within a reasonable time frame.

Because the crew on shift during the incident on initially deferred the problem to the SSS, they felt he was dealing with the problem. They assumed he would initiate the DER for the event. The results from the interviews indicated that the deferring of problems to the supervisor instead of initiating written documentation is the norm for most crews. They also assumed that there was complete disclosure to the Acting General Supervisor Operations and that the matter would be corrected. This turned out not to be the case. The Acting General Supervisor did not think there was a problem based on the brief statements made to him by the SSS.

Members of the crew on shift during the incident commented that they normally defer to their supervisor for resolution once a matter has been brought to the supervisor's attention. Additionally, the crew generally feels that administrative issues are handled by SROs and, therefore, defer their responsibility to the supervisor; e.g. preparation of DERs. This indicates a lack of clear understanding of accountability and responsibility particularly in situations where the supervisors actions are in question.

The on-shift license personnel, and in particular the SSS, collectively failed to demonstrate a conservative approach by not checking the Technical Specification for specific requirements, not making any note in a log or drafting a DER. Based on the crew's response to this incident, additional management attention is required to implement a conservative approach to plant operations.

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The failure to report the event could possibly have happened on other crews since other crews expressed similar comments about deferring administrative issues to their supervisor in lieu of submitting a DER themselves. The chances of this occurring on other shifts may be less likely due to somewhat better communication skills of the other SSSs.

Although at the time of the event the on-shift SSS feit there was lee-way to interpretation, during interviews after the event all feit Technical Specification Section 6.2.2.e was "black & white", including the SSS in question. It should be noted, however, that there has been a failing to look up requirements in Section 6 of the Technical Specifications when in doubt.

There was no view expressed by interviewees that they believed management up the chain of command would over-react or not understand the problem. Relative to the date of the event, the SSS did not think there was a problem and the crew did not recognize the event as a problem that was not being resolved.

During the interview, the represented employee indicated the reason he called the General Supervisor Operations on

was that this supervisor was the next person in the chain of command.

The reason given for the delay in reporting to the Plant Manager was that the Operations Manager told the Plant Manager at 0730 on he wanted to personally verify details before giving a full report on a potentially reportable incident.

Regarding reporting to the NRC, the normal practice on these type of matters is for the Plant Manager to inform the Sr. Resident Inspector. The requirement is to report per LER within 30 days. Our practice is to immediately notify the NRC on matters of significance. The NRC Resident Inspector was told shortly after the Plant Manager and VP Nuclear Generation were briefed on the specifics on

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8. <u>**RESULTS OF INVESTIGATION:</u>** (Continued)</u>

B. RESULTS OF UNIT 1 AND UNIT 2 CONTROL ROOMS LOG TRANSACTIONS

The purpose of the review of the security access logs related to the event was to determine if there were other instances where there might have been no SRO in the Control Room as required by Technical Specifications. The time period that was reviewed was as being through representative of the recent time preceding and involving the The print-outs of the log entries were incident in guestion. generated from the computer by the security organization and were initially reviewed by representatives of the security department. Following their review, those entries with questions were reviewed and verified by a representative of the Operations Department and concurrently a representative from Quality Assurance to assure that no period was overlooked. Results of the review and verification of the computer print-outs, both at Unit 1 and Unit 2 confirmed that this particular instance was an isolated incident and the only discrepancy relative to not having an SRO in the Control Room as required by Technical Specifications.

8. C. RESULTS OF UNIT 1 LER EVALUATION

There were 10 LERs issued on Unit 1 from January 1, 1992 to The 10 involved were the following:

LER 92-01 - Turbine First Stage Bowl Pressure

LER 92-02 - Breach of Secondary Containment

LER 92-03 - Reactor Scram EPR Failure

LER 92-04 - Reactor Scram - Sticking Pivot and Worn Pin to Lower Connection On Turbine Stop Valve

LER 92-05 - Loss of Ultimate Heat Sink (D Gate Event)

LER 92-06 - Technical Specification Violation Due to the Ineffective Change Management

LER 92-07 - Initiation of an Engineered Safety Feature due to Poor Design Configuration

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- LER 92-08 Reactor Scram on High Neutron Flux due to Failed MPR Servo Motor
- LER 92-09 Reactor Scram due to Failure of LPRM Detector
- LER 92-10 Violation of Technical Specification due to Personnel Error

Of the 10 LERs issued, the evaluation indicates that only four (4) of the ten (10) relate to personnel within the operating crews. The first of the four (4) LERs is 92-01 - First Stage Bowl Pressure, where similar weaknesses were noted during the review of this event where the SSS did not adequately communicate to the General Supervisor the specific malfunction and Technical Specification violation. A DER was not written until the second occurrence and resolution of this issue was not completed until senior operations management was involved. The event involved two crews and a third separate SSS who reviewed the work requests after work had been completed without finding the cause of the problem. It should be noted that following this event several corrective actions were implemented including Licensing Basis Training, Technical Specification Training as well as enforcement of the DER process.

The next LER involving Operations personnel was LER 92-05 dealing with Loss of the Ultimate Heat Sink. Evaluation of this event indicated it was caused by a breakdown in crew communication between the CSO and the SSS. A knowledge deficiency between maintenance personnel and operators (CSO and IPE) as to plant impact was also a contributing factor. Maintenance personnel failed to follow the work control process.

The third LER is LER 92-07 - Initiation of an Engineered Safety Feature. Evaluation of this LER indicates that the equipment design was the problem and was not related to Operations personnel perse. It is important to note that the operating crew identified a potential problem with this test (blown fuses) before starting the procedure. The SSS on shift reviewed the concern and decided to proceed with the procedure. He implemented an individual review and briefing with the operating crew as appropriate. The Log Book entry was made.

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The final LER is LER 92-10 - Violation of Technical Specification. Evaluation of this event involved a misinterpretation of Technical Specification Section 3.6.2(a) in how a recent safety evaluation affected the interpretation of a sub-note (e). This error was one of interpretation on the part of the ASSS. There is however a common thread as part of this event where a different SSS authorized bypassing of an APRM earlier in the start-up. That was a violation of Technical Specification 3.6.2 as well as a procedure violation. Again, personnel error, failure to follow procedure and error in judgment. This event was identified by the on-coming shift, a DER was written and notifications were made as required.

Based on the review of these LERs the following summary is provided representing some basic generic weaknesses:

- Communications between CSO, ASSS and SSS.
- Communications between SSS and General Supervisor Operations.
- Knowledge deficiency in Technical Specification 3.6.2 Basis
- Knowledge deficiency in Technical Specification 3.6.2 Section 6
- Use of DER process for problem identification
- Incomplete, misleading or vague communications regarding events being passed from SSS to crew or SSS to his supervision.

8. D. RESULTS OF UNIT 1 DERS REVIEWED

A total of fifty-five (55) DERs were reviewed for trends that potentially relate to the event of Of these fiftyfive (55) DERs initiated since January 1, 1992, twenty-one (21) were identified relating to operation personnel.

Of these twenty-one (21) DERs all but two (2) have been closed and action taken on each specific instance. Overall the results indicate that fourteen (14) of the twenty-one (21) were selfidentified, which includes various members of both operating crews and/or management personnel. There were several instances where the 72-hours work limit in a 7-day period was exceeded without prior approval. In each case it was self-identified and corrective measures were taken to correct each occurrence. -. .

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Types of problems indicated on these DERS are as follows:

- Some required entries not made in SSS log
- Duties of CSO could be in violation of 10CFR50.54 (1) Power change without prior approval document
- Unauthorized removal of Hold Tags
- Personnel entry into High Rad area violation Technical Specification 6.12
- Procedure non-compliance master key not turned in
- Failure to follow repeat back and self checking
- Operator Rounds Logs
- Filter Sludge Clarifier Flush Water BV 45-398, Inadvertently Opened
- Performance Expectations for Station Recordkeeping
- Breach of Secondary Containment at Refuel Airlock Doors
- Exceeding 72 hours worked in 7 days without prior approval.
- Valves with Red Mark-Up Removed from System
- Violation of NDD-FFD, Section 3.1.4 Alcohol Consumption
- Packing adjusted on isolation valve during vessel hydro
- Reactor Building Track Bay Roll Door Seal Damage

Summary Generic Weaknesses:

- Failure to Make Required Log Entries
- Failure to Initiate DERs
- Failure to Comply with Procedures
- Failure to Adequately Communicate Specifics with Personnel within the Crew and up the Chain of Command

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9. <u>CONCLUSIONS OF THIS INVESTIGATION</u>:

- The Technical Specification Section 6.2.2.e was violated. On from to there was not an on-shift active SRO present in the Unit 1 Control Room. Based on the results of the Unit 1 and Unit 2 security transaction logs, the particular event of was an isolated incident. No other discrepancies were identified.
- Upon return to the Control Room, the on-shift SSS failed to properly evaluate Technical Specification Section 6.2.2.e and as a result did not document and report the event in accordance with station procedure. This is unacceptable performance.
- The on-shift license personnel, and in particular the SSS, collectively failed to demonstrate a conservative operating philosophy by not checking the Technical Specification for specific requirements, not making any note in a log or drafting a DER. Based on the crew's response to this incident, additional management attention is required to implement a conservative approach to plant operations.
- The most probable cause of the on-shift SSS's failure to properly evaluate Technical Specification Section 6.2.2.e was his narrow focus on completing and closing the LCO on the Reactor Building Emergency Ventilation System to the exclusion of other matters. The SSS was concentrating on clearing the documentation related to the LCO, processing required paperwork, dealing with several other operational issues, and writing up his log in preparation for shift turnover in approximately 1 1/2 hours on a on the day of 7 days on This is clearly unacceptable performance.
- There was a breakdown in timely reporting of the event up the chain of command due to the SSS being less forthcoming in conversation with his crew members and his supervisor, and a lack of a more questioning attitude on the part of the staff SRO, on-shift STA, ASSS and Acting General Supervisor of Operations.

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- It is noteworthy that represented employees persisted in pursuing the matter. Follow-up by represented licensed operators occurred after they felt enough time had elapsed for management action and not seeing any action, they raised the question up the chain of command. This received the immediate attention of management.
- There is no evidence of any deliberate conspiracy or cover-up.
- Uncertainty exists regarding specific Shift Technical Advisor (STA) roles, responsibilities and relationships with operating crews in spite of the fact that a dedicated STA has been on shift for almost a year. More effective use of the STA could have prevented the failure of not reporting this event in a timely manner had the SSS had the STA research the Technical Specification requirements and document the event on a DER..
- This event, coupled with some other Unit 1 recent events such as 1st stage bowl pressure, loss of ultimate heat sink incident and APRM/IRM being bypassed, indicate we have not yet effectively learned our lessons regarding a questioning attitude, checking requirements, initiating DERs promptly, and accurately reporting and communicating up and down the chain of command. This demonstrates a failure on management's part to effectively implement past corrective actions to preclude recurrences.
- There were no adverse safety consequences as a result of this event. The plant remained at 99 percent power with no challenges to safety during the five (5) minute event.

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10. <u>RECOMMENDATIONS</u>:

- Remove the SSS (on shift during the incident) from license duties.
- Have Operations Management promptly review results, conclusions, and lessons learned regarding this investigation with operating crews.
- As lessons learned from this incident, clearly communicate and discuss the importance and seriousness of implementing the following practices:
 - Apply Stop, Think, Ask, Act, Review (STAAR) to everything we do
 - When a requirement is questioned <u>always</u> look it up to get facts - don't guess.
 - If not sure on an event, document event in log and initiate DER immediately to let process work regarding operability, reportability, informing Plant Manager and proceeding with required actions.
- Clarify current management expectations on when they expect to be notified of a problem. For example, when the violation was confirmed the morning of the Plant Manager should have been notified immediately.
- Review effectiveness of back-to-basics training conducted for operating crews and strengthen interaction and understanding of expectations both up and down the chain of command within Operations.
- Clarify responsibility and accountability of operating shift personnel.
- Clearly and promptly define and communicate the roles and responsibilities of Shift Technical Advisor (STA) on shift and relationship to crew members. Follow-up to verify effectiveness.

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- Review crew manning and composition for improved balance of personnel on each crew.
- Regarding Information Notice 91-24 evaluate how effective the training was and make changes based on this event.

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APPENDIX A

TEAM MEMBERS & BACKGROUND

Team Leader

<u>James Perry</u>, Vice President of Nuclear Quality Assurance. Mr. Perry has extensive experience in the nuclear field since 1958 following his completion of a tour of duty as an Engineering Officer in the United States Navy. He has served in his present capacity as Vice President Nuclear Quality Assurance since January 1986. He is a member of the ASME Board of Nuclear Codes and Standards and Chairman of the ASME Nuclear Quality Assurance Committee. He holds a B.S. Degree in Electrical Engineering from the University of Santa Clara and is a Registered Professional Engineer.

Team Members

<u>Robert Burtch</u>, Manager of Nuclear Communications & Public Affairs. Mr. Burtch has 19 years of experience in Nuclear Utility Communication and 17 years with Niagara Mohawk. He holds a B.A. Degree from the State University of New York College at Oswego and concluded four years of military service in 1969 as a highly decorated Field Artillery Captain in the United States Army.

<u>James Burton</u>, Manager of Quality Assurance Unit 1. Mr. Burton came to Niagara Mohawk in July of 1985. In 1986 he was licensed as a Senior Reactor Operator at Nine Mile Point Unit 2 and served as license requalification program coordinator. Prior to joining our organization, he was an operator at Carolina Power & Light's Shearon Harris Nuclear Plant Unit 1 and had additional nuclear experience with the United States Navy with 10 years qualifying experience.

<u>Gerald W. Krueger</u>, Director of Human Resource Development. Mr. Krueger has approximately 18 years of experience in human resource management in manufacturing and diverse product organization. He holds a M.S. degree in Organization Development and has been Director of Human Resources for three organizations. Since April 15, 1992 he has been Director HRD with the Nuclear Division.

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<u>Frederick McCarthy</u>, Supervisor Nuclear Security Investigations. Mr. McCarthy has been with Niagara Mohawk since 1981 working in the Nuclear Security Department. He has 24 years experience in Law Enforcement with the New York State Police. Eleven of the 24 years were served as Investigator and Unit Coordinator with the Bureau of Criminal Investigation.

John Mueller, Manager of Operations at Unit 2. Before joining Niagara Mohawk this month, Mr. Mueller was Maintenance Manager for three years at Entergy Operations Arkansas Nuclear Unit 1 in Russellville, Arkansas. Prior to ANO, he was Mechanical Superintendent for five years at Grand Gulf Station. He is a 20-year veteran of the Navy's Nuclear Program, having served in various radiological, quality assurance and maintenance positions.

<u>Robert A. Sanaker</u>, General Supervisor Operations Training at Nine Mile Point Unit 1. Mr. Sanaker has 23 years experience in the nuclear field. His experience ranges from working at Detroit Edison Fermi Power Plant as a Start-Up Test Phase Engineer, Washington Public Power Supply System at Unit 2 and HGP as Test & Start-Up Engineer, and Shift Supervisor at Westinghouse Hanford Company and the United States Navy in the operations and maintenance areas. Bob has worked for Niagara Mohawk for four years within the operations training group.

<u>Dennis Stone</u>, General Supervisor of Operations. Mr. Stone joined Niagara Mohawk in September 1992. He is currently working within the Operations group and will eventually obtain an SRO license before assuming full duties of General Supervisor of Operations. He has 21 years of nuclear experience which include the United States Navy and has held numerous positions in the Operations Department at Fermi II, including Station Shift Supervisor. He has held both RO and SRO licenses and participated in outages both forced and refueling and held the position of Supervisor, Production Quality Assurance. ----

APPENDIX B

UNIT 1 SHIFT CREWS SCHEDULE



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APPENDIX C

TERVIEW FORM FOR SSS. ASSS. S. & RO

Perso	on interviewed		·
Title		Shift Crew	······································
Inter	viewers	&	
Start	time	End time	•
1.	Did you have perso brought to the atten	onal knowledge of the event before ation of the Plant Manager? (All)	when it wa
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2.	How should this in	cident have been reported? (All)	•
3.	How do you feel al	pout the way this concern has been handled so far? (A	(IV
			······································
4. 	Do you feel that yo	u are a member of the management team? (SSS, ASS	S) ` . ,
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. • Person interviewed

- How would you evaluate your knowledge and familiarity with Section 6 of the Tech Specs?
 (SSS, ASSS, STA & RO)
- 7. Has anything in past practices led you to believe that you have latitude to interpret Tech. Spec. Section 6? (SSS, ASSS)

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Person interviewed

Do you know of other licensed operators having knowledge of this event before 8. -? (SSS, ASSS, STA & RO) 4 . e As a licensed operator, what do you feel your responsibilities are with respect to reporting and 9. communicating this event to see that it was resolved? (SSS, ASSS, STA & RO) <u>, 8</u> . Are there issues in today's environment (i.e. rightsizing, Unit 1 Economic Study) that would have 10. led to failure to report this event? (All) . Before this happened, if you were told of this event, what would you think the impact might be 11. on the company? After experiencing it, what do you think the impact is? (All) and a final a second a second a second a second second second second second second second second second second

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12. What if this incident happened with your crew? How would it be handled? (SSS, ASSS, STA, CSO & RO)

13. Why do you think it wasn't brought to senior management's attention sooner? (All)

14. Are there conflicts on that shift that would have contributed to lack of documentation problem? Could this have happened on your shift? (SSS)

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IFICATION VIOLATION OF

APPENDIX "0"

THE LIVE FLOW DWAT



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UNIT 1 TECHNICAL SPECIFICATION VIOL



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APPENDIX E.

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	D)EV/	IATION/A	EVENTER	E.ORE	DER 1-92-3754
PART 1 - IDENTIFICATION (Origin	ator/Superv	teor)		•	. Page 1 of
Deviation/Event SRO 110	is not	present in	the C	ontral Room	n
A - Erent Date/Teme (24 hr.)	8.	Applicability EZI Unit 1 II Unit 2	Common	C - Component No. (EPhvEn)
D - Location (Blog /Elev /Area)				E-System/Equipmer	x T2le
PLINA E-Martified by ET Comments of the int	7 0				
Corrective Maint	Surveitance	Test Alarm	INPO Nema	Personnel (Observation
G - Description of Deviation/Event		-1 - F -	C D 0		· · · · · · · · · · · · · · · · · · ·
<u> </u>		<u>Shi++</u>	NO SKO	Las present	t in the
<u>Control Kcom d</u>	veing f	<u>cuer covert</u>	ion, the	<u>4535 ui</u>	<u>as on a</u>
plant tour w	hen +	<u>10 300</u>	stepped_	out of t	ne control
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H - CI WR Initiated - List WR No(s).	N/A		I - Originator (Print	Date) Frenk	Siencz, k 1
J-Supervisor (Print/Initial/Date) Erico	impaint on Plan	Equipment; No Proced	are Violation; Not Re	portable	Phone Ext. Org. Code
				•	1.42
A - Environment Operable		1 1	B - Nuclear Engine		IC . LCO Entry
Yes INO NA Basis:	Peren	-lenn	Determination R	lequired TYes EN	
D - Plant Operation (Mode)	Circle One	- 1 2 3 4 5 6	Rx Power MH/e:	619	<u>1848</u>
Pix Temperature 533	Pix Pressure	1030	Rx Level 7	' <i>y</i> ''	Core Flow
Activity in Programs			4		E-ESL Entry Required Yes ENo
F - Reportable Determination 🔲 Yes (Yes, Send Co	py to Licensing.) 🗮 No	Basis for Determin	tion: 62.2.C	of Tech dans.
20.402 No transdate		26.73 🖸 No	🗆 24 Hr.	73.71	0 No 0 1Hr. 0 24 Hr.
20.403 D No D Immediate	□ 24 Ht.	50.72 Ho		4 Hr. 40CFR30	2 D No · D Immediate
20.405 L No L 30 Days		50./3 LINO	Tes	LER No.	
	G-NHC NOOL	edi Linex Li, Pedan			
H - Person Notifying NRC - Name (Print)		·····	Signature/Date		
I-SSS (Print Name) GEORGE	S. She	LLinu	Signature/Date	- handle	ellin 1
PART 3 - ACTION ASSIGNMENT (P	lent Mensoe	r)			Ú.
A - Responsible Organization On	c. Code Co	Angliete Part 4 by: *	C - Comments		
B. Plant Manager Sometime Data	SOBC Rainer	Regid? Fura Flat			
. Lisell			• <u>•</u> ••••••••••••••••••••••••••••••••••		
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NVNIAGARA VMOHAWK	DEVIA	aricin.	EVENT	4231:	1	
PART 4 - DEPOSITION (Resport	ebie Organizati	ion)	• • •			
A - Disposition(s) (Including Corrective	Preventive Action)/R	oot Catine				
	was	notifier	1 on the	e eveni	4	
of the event	that 0	coured	<u>~ ·</u>			
held a facts	Finding	meeting	on the	marni		October
to investigate	and de	coment "	the de-	ails o	ت بلو	event-
As part of H	re inves	tication	the s	ecurity_	kev c	ard los The
will be looked	l at.			1		
Corrective a	rtion to	this	mblem	may in	clude	the SSS
and ASSS to	conduct	a turn	iover and	an S.	SS loa	entr
that as SRO	has le	eft the	. Control	Rec.m.	And	the "
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(GAP-OK-OL	LIDD-OPS	1				· · · · ·
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- Root Cause Performed	F - Scheduled Comp	xistion Date		Q - Part 21 Re	view Regulat	
			•		Yes, Said Co	py to Licensing.). 🔲 His
Dispositioner (Print/Date)	-	•	J - Branch Manager	(Print/initial/Date)	•	,
		!	ł		/	
IRT 5 - CLOSURE (Responsible	Organization)	1200000			Ť	Actual Consistion Date
nieczystywarzyskie Action(s) Compiele rin/Initial)	a v v erzeg + Brinch M					
ART 6 - DATABASE UPDATE (QA	.0)	•••				
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