APPENDIX A

Notice of Violation

Niagara Mohawk Power Corporation
Nine Mile Point Unit 2

Docket No. 50-410
License No. NPF-69

During an NRC inspection conducted from November 1, 1992, through December 12, 1992, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1992), the violation is listed below:

A. Technical Specification 6.8.1 and Appendix A to Regulatory Guide 1.33 require, in part, that written procedures shall be implemented for the surveillance testing of the standby liquid control system.

Standby liquid control system surveillance test procedure N2-OST-SLC-Q-001 requires that inservice testing department personnel be notified and a procedure change be written if a 0-100 inch of water pump suction pressure gauge is not installed.

Contrary to the above, on November 12, 1992, during the performance of N2-OST-SLC-Q-001, inservice testing department personnel were not notified and a procedure change was not written when a 0-200 inch of water pump suction pressure gauge was installed.

This is a Severity Level IV violation (Supplement 1).

Pursuant to the provisions of 10 CFR 2.201, Niagara Mohawk Corporation is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555, with a copy to the Regional Administrator, Region I, and a copy to the NRC Resident Inspector, within 30 days of receipt of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Where good cause is shown, consideration will be given to extending the response time.

Attachment 1

LIST OF ATTENDEES

Niagara Mohawk

R. Sylvia, Executive Vice President, Nuclear
N. Carns, Vice President, Nuclear Generation
J. Perry, Vice President, Quality Assurance
C. Terry, Vice President, Nuclear Engineering
D. Green, Manager, Licensing
R. Smith, Manager, Technical Training
M. McCormick, Plant Manager, Unit 2
D. Baker, Licensing Program Director, Unit 2

NRC

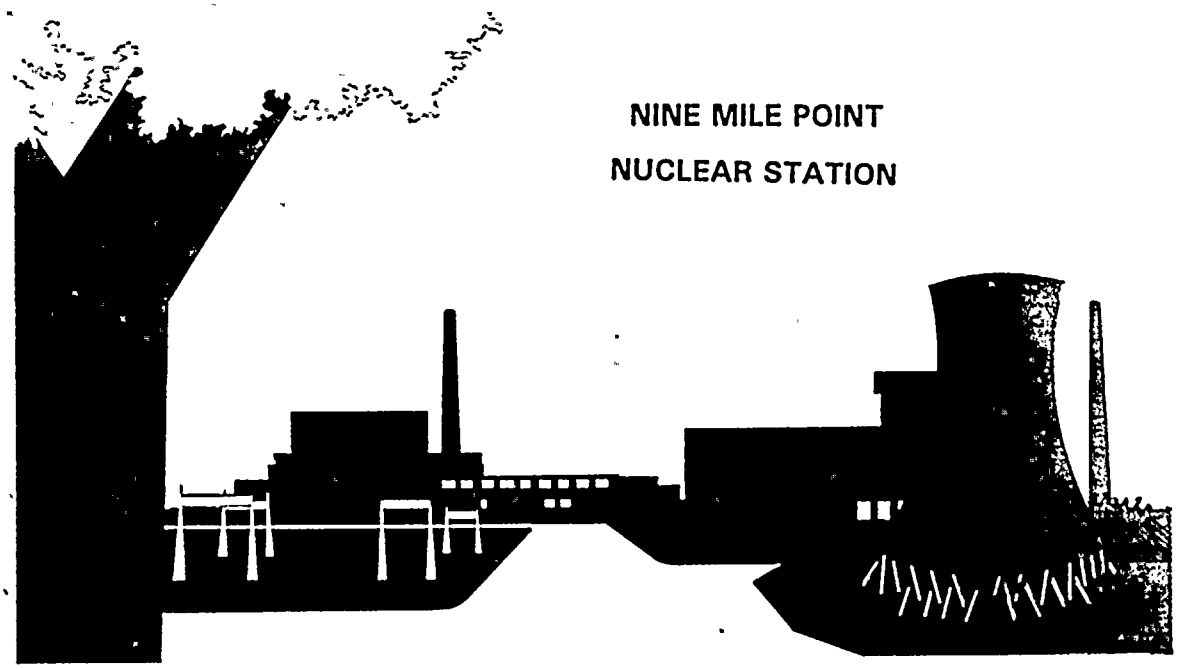
T. Martin, Regional Administrator
W. Hehl, Director, Division of Reactor Projects, (DRP)
W. Hodges, Director, Division of Reactor Safety
C. Cowgill, Chief, Projects Branch No. 1, DRP
L. Nicholson, Chief, Reactor Projects Section 1A, DRP

NIAGARA MOHAWK

NUCLEAR DIVISION

NMPC - NRC
QUARTERLY MEETING
REGION I

KING OF PRUSSIA



NINE MILE POINT

NUCLEAR STATION

DECEMBER 1, 1992

AGENDA

Business Planning	B. R. Sylvia
Deviation/Event Report Program	J. A. Perry
Rightsizing	N. S. Carns
Management/Union Relations	N. S. Carns
Issues	C. D. Terry

- Loss of Offsite Power Evaluation
- Unit 1 Economic Study

Unit Status and Related Issues	M. J. McCormick

1993-1996

BUSINESS PLAN

003262LL2

NUCLEAR SBU BUSINESS PLANNING

MISSION

The Nuclear SBU operates its plants safely, efficiently, and competitively to maximize generation at the lowest possible cost to meet the needs of customers, shareholders, and employees.

VISION

The Nuclear SBU will continuously improve its performance so that by 1995:

- It will be one of the best* run nuclear operations in the industry.
- It will survive in a competitive market.

INPO 1 and SALP 1

NUCLEAR SBU BUSINESS PLANNING

Performance Objective 1

SAFETY - C. D. TERRY

Protect the health and safety of the public and employees.

- **Strategies and Key Action Items:**

  A. Maximize safety system performance.

  - Develop and implement action plans to address significant NRC concerns (Generic Letters).
  - Identify and resolve BWROG/NUMARC safety issues.
  - Continue support of Emergency Preparedness to maintain a SALP 1.
  - Conduct safety reviews for planned activities for shutdown safety issues prior to and throughout outages.

  B. Minimize on-site radiation exposure.

  - Develop and implement changes to the Standards for Protection Against Radiation (10CFR20). *(January 1994)*

NUCLEAR SBU BUSINESS PLANNING

SAFETY (Cont'd)

- **Strategies and Key Action Items (Cont'd):**

  C. Optimize handling and storage of radiological materials.

  - Continue to implement plans for interim storage of low-level radioactive waste and spent fuel.
  - Evaluate the feasibility of the treatment of mixed waste generated on site.

  D. Minimize lost-time injuries due to occupational accidents or illnesses.

  - Implement improvements in training.
  - Evaluate the tagging/markup system for personnel safety concerns.

NUCLEAR SBU BUSINESS PLANNING

Performance Objective 2

COMMERCIAL - N. S. CARNS

Operate the plants to maximize production at the lowest achievable cost in keeping with the highest standards for nuclear safety.

- **Strategies and Key Action Items:**

  A. Increase efficiency and maximize plant equipment performance and reliability.

  - Continue to develop and implement a comprehensive reliability-centered maintenance program and meet the maintenance rule by July 1996.
  - Continue to maintain and update the "Top 10" Technical Problem List for each station.

  B. Minimize outage duration.

  C. Implement operational and cost-related improvements.

  - Develop and implement an integrated long-range plan.
  - Develop and finalize a plan for decommissioning (Unit 1) and O&M rampdown by January 1994.

NUCLEAR SBU BUSINESS PLANNING

COMMERCIAL (Cont'd)

- **Strategies and Key Action Items (Cont'd):**

  D. Simplify work processes and procedures.

  E. Rightsize the Nuclear SBU.

  F. Reduce scram frequency.

  - Implement a scram frequency reduction program.

NUCLEAR SBU BUSINESS PLANNING

Performance Objective 3

REGULATORY - J. F. FIRLIT

Improve regulatory performance and communications with external constituencies.

- **Strategies and Key Action Items:**

  A. Continue to improve communications and relationships with external constituencies.

  - Perform self-assessments against INPO and NRC criteria.

  B. Continue to improve communications and relationships with the public and news media.

  C. Continue to improve regulatory performance and compliance.

  - Update and present to NRC the comprehensive five-year plan that addresses NRC-related issues.
  - Monitor and evaluate industry progress in adopting improved standard Technical Specifications.
  - Comply with environmental laws and regulations, in coordination with the Corporate Environmental Policy.
  - Minimize the number of NRC resident open items.
  - Define and train personnel on configuration management.

NUCLEAR SBU BUSINESS PLANNING

Performance Objective 4

PROFESSIONAL - G. W. KRUEGER

Maximize individual and organizational performance to achieve desired results.

- **Strategies and Key Action Items:**

  A. Provide the leadership necessary to bring about a change for our survival.

     - Determine barriers to improving empowerment.

  B. Take the initiative to develop a good business relationship with the union.

     - Achieve a common understanding of business needs and goals.

  C. Improve performance management to meet our mission.

  D. Provide training necessary to meet our mission.

  E. Improve site facilities.

DEVIATION/EVENT REPORT PROGRAM

DEVIATION/EVENT REPORT (DER) PROGRAM

Program Implementation

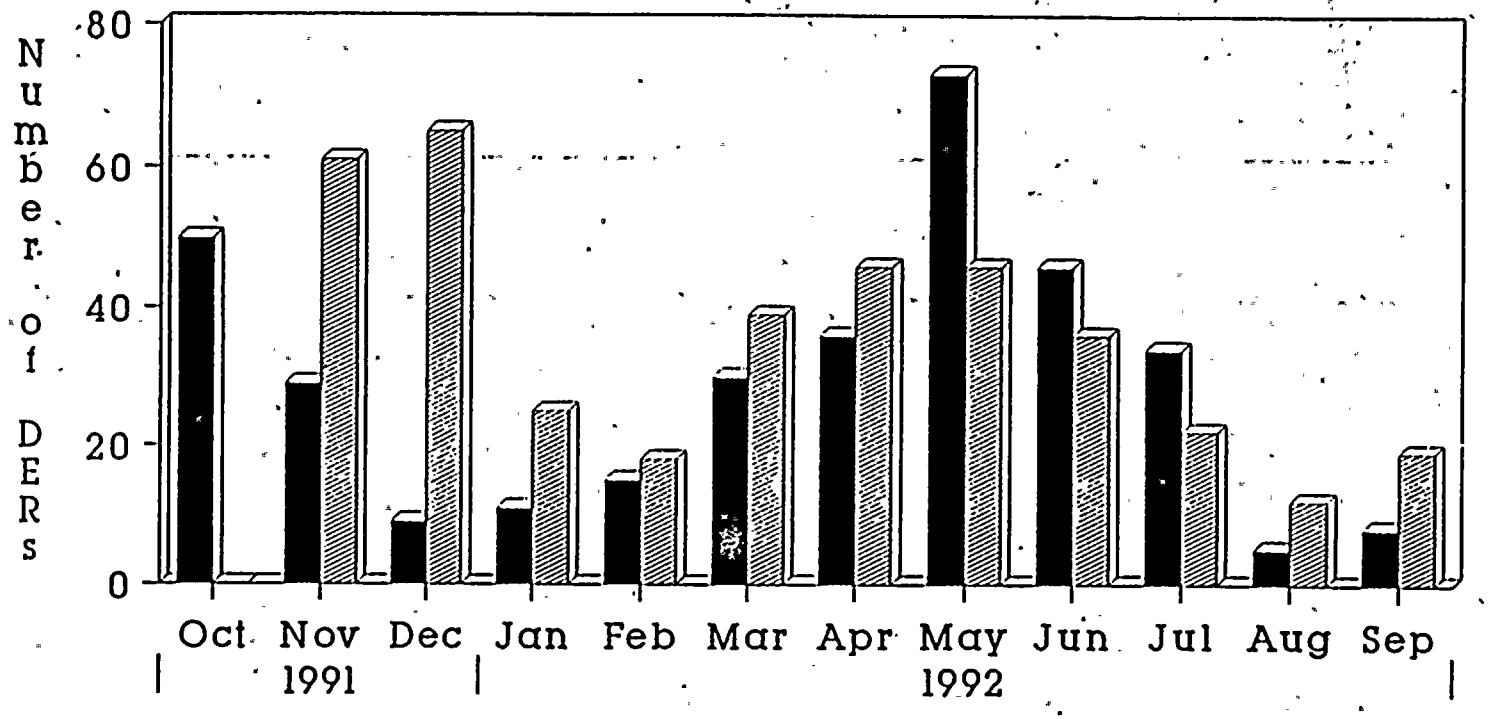
- April 1992 simplified procedure and process, improved implementation.
- Processing DERs by Plant Managers and Branch Managers greatly improved ownership by line organization.
- Implementing corrective actions on schedule is improving.
- Improvements needed:
  - Timely documentation
  - Use of root cause to determine preventive action
  - Follow-up on effectiveness of actions taken

DEVIATION/EVENT REPORT (DER) PROGRAM

What is the Program Telling Us?

- Use of DERs is now institutionalized.
- Beginning to see more positive trends in 3rd quarter of 1992 compared to 2nd quarter of 1992.
- Rate of DER closures greater than rate of generation of DERs, thus reducing number of open DERs.
- Personnel errors and hardware problems each running about 40% of DERs written. Actual numbers per quarter are less for the 3rd quarter 1992 compared to 2nd quarter of 1992. Room for continued improvement.
- Better job done on root cause and taking preventive action, greater opportunity for overall improvement.
- When in doubt, document on DER and get process to work as designed; i.e., operability, reportability, Plant Manager Involvement and action party assigned.

Niagara Mohawk Power Corporation
Overdue DERs *

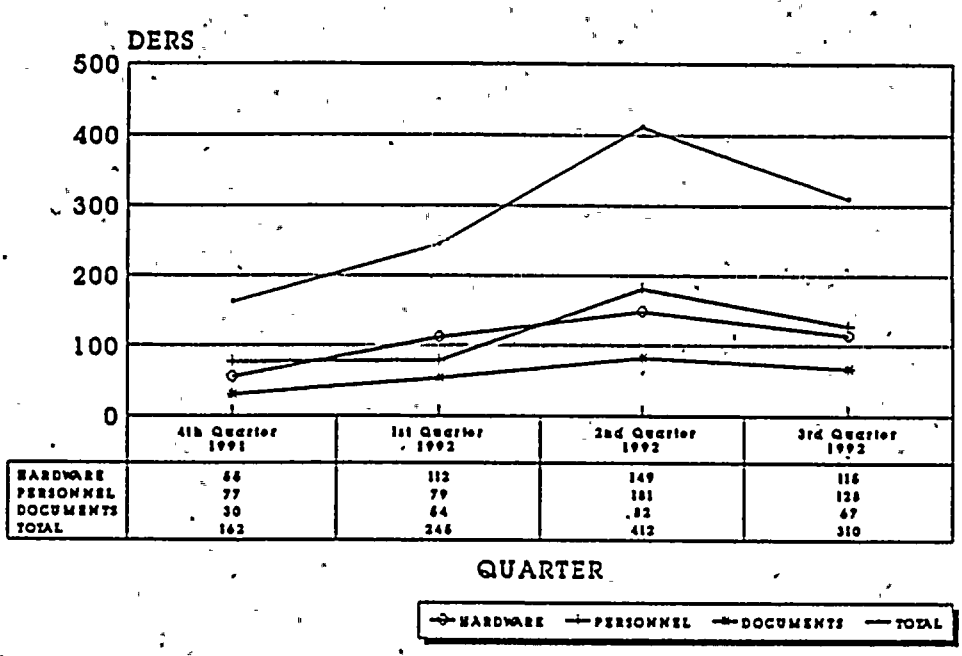


* 1991 - Overdue more than 20 days
1992 - Overdue more than 10 days

Note : Implementation data not available prior to November

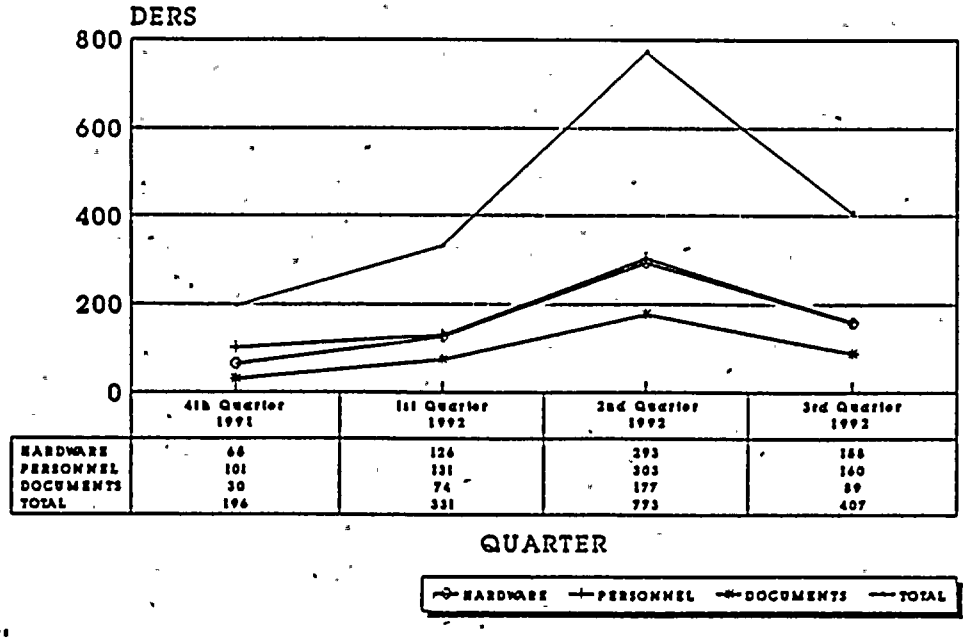
OVERDU92

NINE MILE POINT - UNIT 1
DER CAUSES



	4th Quarter 1991	1st Quarter 1992	2nd Quarter 1992	3rd Quarter 1992
HARDWARE	66	112	149	116
PERSONNEL	77	79	181	128
DOCUMENTS	30	64	82	67
TOTAL	162	246	412	310

NINE MILE POINT - UNIT 2
DER CAUSES



	4th Quarter 1991	1st Quarter 1992	2nd Quarter 1992	3rd Quarter 1992
HARDWARE	66	126	293	188
PERSONNEL	101	131	303	160
DOCUMENTS	30	74	177	89
TOTAL	196	331	773	407

RIGHTSIZING

RIGHTSIZING

New Organization

- 1600 personnel by the end of 1994.
- Based on industry experience

Implementation

- Cautious approach
  - To ensure safe plant operations
  - Minimize impact on outages
- Union/Management teams to look at work practices
- Proper Union/Management ratios

Management Positions

- Establish 1600 organization structure
- Reduce through attrition

Represented Positions

- Union leadership has been involved in decision process
- Potential reductions
  - Following Unit 1 Refuel Outage
  - Following Unit 2 Refuel Outage

ACCELERATED SCHEDULE TO 1600 RIGHTSIZING TARGET

The following functions have been asked to evaluate the opportunities for accelerating staff reductions:

FUNCTION	NAME	# OF EMPLOYEES
Security	N. Carns	40
Engineering	C. Terry	5
Support Services Information Services Procurement Site Services } TO BE REVIEWED	J. Firlit	75
Unit 1 Generation	K. Dahlberg	8
(Look at Fire Department)		3
Unit 2 Generation	M. McCormick	10
(Look at Fire Department)		3
Human Resource Development	G. Krueger	2
Controller	S. Parker	3
Quality Assurance	J. Perry	15
TOTAL		164

MANAGEMENT/UNION RELATIONS

MANAGEMENT/UNION RELATIONS

Management/Union Relations

- Periodic Meetings with Union Leadership to Address Issues
- Union Leadership has Participated in Rightsizing Planning Sessions
- Mutual Gains Bargaining Training - Ongoing
  - Union Stewards and Branch Managers
  - Win - Win Agreements
- Labor Contract
  - Current Labor Contract expires end of May 1993
  - Union/Management teams to address outstanding conflicts prior to negotiations
  - Work Rule Changes Outside Bargaining Table
  - Improve Relationships on Both Sides - Collaborative Effort

ISSUES

ISSUES

- Loss of Offsite Power Events
  - Offsite Power reliability
  - Safety Standdown
  - Shutdown Safety Reviews
- Unit 1 Economic Study

OFFSITE POWER RELIABILITY

- Six Unit 2 Offsite Power Events Under Review:
  - LER 88-062 - 115 KV line 6 lost due to current transformer explosion. Line 5 also out of service leading to loss of all Unit 2 offsite power.
  - LER 91-012 - Line 5 lost due to Scriba Station excavation work causing cable damage.
  - LER 92-006 - Line 5 lost due to relay technician tripping relay. Failure to reset tripped relay caused loss of line 6 when cross-tie was attempted.
  - LER 92-018 - Line 6 lost when circuit breaker tripped on loss of hydraulic pressure.
  - LER 92-020 - Line 5 lost when contractor's crane boom came too close to line.
  - Line 6 lost due to circuit breaker tripping on loss of hydraulic pressure (same as LER 92-018) - LER in preparation.
- Review team established with lead by Unit 2 Operations.
  - ISEG involved to facilitate and aid in gathering work histories and other information.
  - Non-nuclear groups also involved including Station Design and System Operations.
  - Evaluation expected to be complete in early December.

SAFETY STANDDOWN

- Initiated by near electrocution of three contract personnel when crane came too close to 115 KV line.

- All site construction contractor work stopped.

  - Incident occurred on Friday - evaluated over weekend and contractor "standdown" held on following Monday.
  - Group meeting of all contractors conducted by VP-Nuclear Engineering and Engineering Managers.

- Key points reviewed with contractor personnel:

  - Thorough "what if" questioning is needed when planning jobs - including potential impacts on other plant equipment.
  - Be aware of changing conditions as jobs progress.
  - Previous use of a method does not necessarily mean it is the best or safest.
  - Repetitive work has a strong potential for error and requires increased awareness.
  - All personnel must question any unsafe condition.

SAFETY STANDDOWN (Cont'd)

- Plant impact reviews also strengthened:
  - Work in Progress (WIP) sheets required for all construction activities.
  - The Safety Department and Work Control will review work prior to using equipment in proximity to power lines.
  - Current and future site construction projects will be reviewed by Tech. Review Committee prior to approval.

- Safety standdown also extended to all Nuclear Personnel.
  - Branch Managers conducted sessions with employees.

- Key points of NMPC standdown (management expectations):
  - Safety will not be compromised for schedule.
  - People are the most critical element of our safety and health program.
  - Working safely is a condition of employment.
  - All injuries and occupational illnesses can be prevented.
  - Each level of management is accountable for preventing injuries and occupational illnesses.
  - Each person is accountable for their own safety.

SHUTDOWN SAFETY REVIEWS

- Unit 1 outage shutdown safety review being finalized (due in mid-December).

  - Changes have been made as a result of lessons learned from Unit 2 review.

- Key Lessons from Unit 2:

  - Using System Engineers to review system "windows".
  - March 1992 alert emphasized need to maintain "defense in depth".
  - Clarification of meaning of "N + 1" philosophy in Tech. Staff and Operations training.
  - Integrate surveillance tests into the outage schedule.
  - Include all outage work such as non-safety equipment and non-nuclear work group activities as part of outage P2 schedule.
  - Include power sources and support sub-system information as part of review sheets.
  - Formalize the notification method when a schedule change adversely affects level of defense-in-depth.
  - Categorize risks and develop contingency plans when "N + 1" philosophy is questionable.
  - Stress communication to insure understanding by Operations of potential plant impacts.
  - Breakdown of outage schedule into phases, i.e., before decay heat diminishes, fuel off-load, etc.

SHUTDOWN SAFETY REVIEWS (Cont'd)

- Current status of Unit 1 shutdown safety review:
  - "N + 1" defined in terms of number of systems and components for:
    - Power Availability
    - Decay Heat Removal
    - Inventory Control
    - Reactivity Control
    - Containment
  - Review nearly complete to determine which systems/components will be "protected" (unavailable for work) during outage phases.
  - Review of surveillance testing principal activity to be complete.
  - Initial review to be complete by mid-December but review will be ongoing as conditions change during outage.
- SRAB review planned in December
  - Unit 2 Lessons Learned
  - Overview of Unit 1 Review

NINE MILE POINT UNIT ONE
ECONOMIC ANALYSIS - NOVEMBER 20, 1992

SUMMARY

RESULTS

- 14 Cases Analyzed:
  - Break-Even Capacity Factors: 44.5% - 122%
  - There is much uncertainty surrounding many of the issues used in the analyses, however, the resulting break-even capacity factors establish boundaries using reasonable assumptions

- Base Case:
  - Capacity Factor = 61%
  - O&M, Capital Costs and Staffing Level trended off historical performance
  - Net Present Value **without** environmental externalities = ($139 M)
  - Net Present Value **with** environmental externalities = ($103 M)

NINE MILE POINT UNIT ONE
ECONOMIC ANALYSIS - NOVEMBER 20, 1992

SUMMARY (Cont'd)

RESULTS (Cont'd)

- Improved Performance Case (Nuclear Business Plan Targets):
  - Capacity Factor = 70%
  - O&M, Capital Costs and Staffing Level based on average industry performance
  - Net Present Value **without** environmental externalities = $122 M
  - Net Present Value **with** environmental externalities = $163 M

- Near-Term Operation:
  - Operation is economic for at least two more years - one fuel cycle

NINE MILE POINT UNIT ONE
ECONOMIC ANALYSIS - NOVEMBER 20, 1992

SUMMARY (Cont'd)

FUTURE UNCERTAINTIES

- Levels of Non-Utility Generation
- Fossil Fuel Prices (especially natural gas)
- Impact of Clean Air Act Amendments on Fossil Plant Retirements
- Value of Fossil and Nuclear Environmental Externalities
- Load Growth
- Power System Reliability

NINE MILE POINT UNIT ONE
ECONOMIC ANALYSIS - NOVEMBER 20, 1992

SUMMARY (Cont'd)

COMMITMENTS

- Develop a formal plan for decommissioning and operation and maintenance expense ramp-down by January 1994

- Establish internal and external "triggers" by first quarter 1993, i.e.:

  - Schedule performance in 1993 refueling outage
  - Major equipment failure
  - Attainment of business plan goals
  - Non-utility generation levels
  - Fossil fuel prices
  - Value of environmental externalities

- Monitor performance against "triggers" and re-evaluate economics if thresholds are exceeded.

- Pursue an orderly, planned retirement of the unit if economics and qualitative considerations deem this prudent.

UNIT STATUS AND RELATED ISSUES

UNIT STATUS AND RELATED ISSUES

- Plant Status
- Work Control Program
  - Monitoring Surveillance Status
  - Electronic Work Request System
- Procedure Upgrade Program
- Refuel Outages
- Training Accreditation and Requalification
- Records Falsification

WORK CONTROL PROGRAM

Monitoring Surveillance

- Process and Procedures
  - Work Control Procedures Revised and Approved
  - Training In Process
    - Via Chain of Command
  - Implementation Begins 12/92
- Monitoring
  - Increase Frequency - Twice Per Month Per Unit
  - Focus on:
    - Coaching
    - Clarify Changes in Process
    - Assure that Intent of Streamlining/Simplification Met

WORK CONTROL PROGRAM (Cont'd)

- Monitoring Results
  - Current Focus
    - Coaching
    - Verbal Recommendations
  - Overall Significant Improvement in Work Package Quality
  - Improvements Needed
    - Attention To Detail - Completing Required Entries
- Monitoring DER Status
  - Unit 1: 48 Closed - 7 Open
  - Unit 2: 26 Closed - 9 Open

WORK CONTROL PROGRAM (Cont'd)

Electronic Work Request

- Utilizes a system which has been implemented at other nuclear facilities.

- Benefits:

  - Streamlines process
  - Improves status and accountability monitoring
  - Automatic measure of rework and failed PMTs
  - Improves the planning process by reviewing past work

- Pilot implementation began in September 1992.

- Plan to be fully implemented by end of the year.

PROCEDURES UPGRADE PROGRAM

Administrative - Technical

- Administrative - Programmatic Controls
  - Reviews and Approvals
  - No manipulation of Equipment
  - Focus to Improve Efficiency and Effectiveness Through Volume Reduction and Consolidation
- Technical
  - Equipment Manipulation
  - Data Verification
  - Summary Reporting Based on Above
  - Focus to Improve Performance Through Incorporation of Human Factors Principles Via Procedure Writer's Guide

Overview of Administrative Program

DIVISION AP REDUCTION SUMMARY			
Group	Total APs at start	Planned APs at Finish	% Reduction
NIPs	94	33	64%
Generation	387	122	68%
Engineering	91	79	12%
Support	233	124	47%
Quality Assurance	35	14	60%
TOTAL (Less NIPs)	746	339	55%

REFUEL OUTAGES

Unit 1

- Goals and Objectives

  - Major Work Activities

    - Refuel *(172 new fuel bundles)*
    - Technical Specification Required Testing *(150)*
    - Preventive Maintenance *(161)*
    - Corrective Maintenance *(400)*
    - Design Changes/Modifications *(49)*
      - Regulatory *(17)*
      - Reliability *(32)*

  - Duration < = 55 days
  - Schedule Adherence > = 90%
  - Exposure < = 451 ManRem
  - Budget $23.5 Million
  - Emergent Work < = 25%

- Schedule - February 19, 1993 to April 15, 1993

REFUEL OUTAGES (Cont'd)

Unit 2

- Goals and Objectives

  - Major Work Activities

    - Refuel
    - Technical Specification Required Testing
    - Preventive Maintenance
    - Corrective Maintenance
    - Design Changes/Modifications
    - Other

  - Duration < = 60 Days
  - Schedule Adherence > = 90%
  - Exposure < = (TBD) ManRem
  - Budget $30 Million

- Schedule - September 11, 1993

TRAINING ACCREDITATION

- Accreditation Renewal - Both Units in 1993
  - Operations
  - Chemistry
  - Radiation Protection
- Schedule
  - Self Evaluation Report
    - Already Underway
    - Submit to INPO - First Quarter 1993
  - INPO Site Visit - June 28 to July 2, 1993
  - Accreditation Board Meeting/Decision - Fourth Quarter 1993
- Follow On Accreditation Renewal - Both Units in 1994
  - Maintenance
  - Technical Staff and Managers
- INPO Simulator Evaluations - both units in April 1993

RECORDS FALSIFICATION UPDATE
11/24/92

Operations:

- Nine (9) operators, including one licensed operator, discharged from Unit 1.
- Seven (7) operators discharged from Unit 2.
- Two (2) operators resigned, Unit 2.

Chemistry: No discrepancies found.

Rad Protection: No discrepancies found.

Fire:

- Two (2) firemen at Unit 1, disciplinary action pending.
- One (1) additional fireman at Unit 1 under review.
- Thirteen (13) firemen at Unit 2, disciplinary action pending.

  Note: Arrangements have been made to shift resources between the units to accommodate possible manpower shortfalls.

- ***Maintenance***: Currently under review.