

January 28, 2002

Mr. Bruce Williams
Vice President, TMI Unit 1
AmerGen Energy Company, LLC
Three Mile Island Nuclear Station
PO Box 480
Middletown, PA 17057-0480

SUBJECT: THREE MILE ISLAND STATION, UNIT 1-NRC INSPECTION REPORT
50-289/01-08

Dear Mr. Williams:

On December 29, 2001, the NRC completed an inspection at your Three Mile Island Unit 1 facility. The enclosed report documents the inspection findings which were discussed on January 11, 2002, with Mr. Gellrich and other members of your staff.

This inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations, and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, the inspectors identified one issue of more than minor safety significance. The significance of this finding is to be determined pending NRC review of a potential licensee event report involving the issue. This issue was also determined to involve an apparent violation of NRC requirements.

Immediately following the terrorist attacks on the World Trade Center and the Pentagon, the NRC issued an advisory recommending that nuclear power plant licensees go to the highest level of security, and all promptly did so. With continued uncertainty about the possibility of additional terrorist activities, the Nation's nuclear power plants remain at the highest level of security and the NRC continues to monitor the situation. This advisory was followed by additional advisories, and although the specific actions are not releasable to the public, they generally include increased patrols, augmented security forces and capabilities, additional security posts, heightened coordination with law enforcement and military authorities, and more limited access of personnel and vehicles to the sites. The NRC has conducted various audits of your response to these advisories and your ability to respond to terrorist attacks with the capabilities of the current design basis threat (DBT). From these audits, the NRC has concluded that your security program is adequate at this time.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm.html> (the Public Electronic Reading Room).

Sincerely,

/RA Curtis J. Cowgill for/

John F. Rogge, Chief
Projects Branch 7
Division of Reactor Projects

Docket No: 50-289
License No: DPR-50

Enclosure: NRC Inspection Report 50-289/01-08
Attachment: Supplemental Information

cc w/encl: Amergen Energy Company - Correspondence Control Desk
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U.S. NUCLEAR REGULATORY COMMISSION

REGION 1

Docket No: 50-289
License No: DPR-50

Report No: 50-289/01-08

Licensee: AmerGen Energy Company, LLC (AmerGen)

Facility: Three Mile Island Station, Unit 1

Location: PO Box 480
Middletown, PA 17057

Dates: November 11-December 29, 2001

Inspectors: J. Daniel Orr, Senior Resident Inspector
Craig W. Smith, Resident Inspector
Wayne L. Schmidt, Senior Reactor Inspector, DRS
David M. Silk, Senior Emergency Preparedness Inspector, DRS

Approved by: John F. Rogge, Chief
Projects Branch 7
Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000289-01-08, on 11/11 - 12/29/2001, AmerGen Energy Company, LLC, Three Mile Island Unit 1, integrated resident inspector report, operability evaluations.

The report covered a seven-week period of inspection by resident inspectors and two region-based inspectors. The inspectors identified one issue of more than minor safety significance, which was classified as an apparent violation. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at <http://www.nrc.gov/reactors/operating/oversight.html>.

A. Inspector Identified Findings

Cornerstone: Mitigating Systems

- **To be determined.** AmerGen failed to adequately correct a 120Vac safety-related inverter unreliable condition. A modification to eliminate rapid cycling of the 120Vac inverters between ac and dc sources during transient ac source conditions was inadequate and ineffective for some potential engineered safeguards actuation system initiation scenarios.

The safety significance of the inverter unreliable condition was more than minor because five ac inverters that support vital instrumentation and control were returned to service with an inadequate modification and an unreliable condition. The inverter problems could have prevented the fulfillment of the emergency feedwater system. The safety significance of this finding is not yet finalized pending review of AmerGen's licensee event report to provide more details about the operability and availability of the emergency feedwater system while the plant was in hot shutdown conditions. AmerGen's failure to fully evaluate an unreliable safety-related inverter problem and assure adequate corrective actions to preclude repetition is an apparent violation of 10CFR50, Appendix B, Criterion XVI, "Corrective Action." (Section 1R15.1).

B. Licensee Identified Violations

- Two violations of very low safety significance which were identified by AmerGen were reviewed by the inspectors. Corrective actions taken or planned by AmerGen appear reasonable. These violations are listed in Section 4OA7 of this report.

Report Details

Summary of Plant Status

AmerGen Energy Company, LLC (AmerGen), operator of Three Mile Island, Unit 1 (TMI), continued their Cycle 14 refueling outage (14R) activities through December 5, 2001. Major outage activities included refueling of the reactor core, vessel head penetration inspections and repairs, once-through steam generator inspections and repairs, main and auxiliary transformer replacements, and plant process computer replacement. The unit was restarted on December 6, 2001 and reached 100 percent power on December 9, 2001.

1 REACTOR SAFETY

Initiating Events/Mitigating Systems/Barrier Integrity [REACTOR - R]

R04 Equipment Alignment

a. Inspection Scope

The inspectors conducted one partial system walkdown on the high pressure injection and reactor coolant makeup system. The system performs risk significant functions to supply reactor coolant pump seal injection flow during normal operation and to provide redundant sources of high pressure injection during accident conditions. The inspectors performed the walkdown with the system aligned in various configurations to support engineered safeguards actuation system testing. The inspectors verified the system alignment was in accordance with operating procedure 1104-2, "Makeup and Purification System," and test procedure 1303-5.2, "Emergency Loading Sequence and High Pressure Injection Logic Channel / Component Test," and that operating parameters were consistent with the plant operating condition.

b. Findings

No findings of significance were identified.

R05 Fire Protection

.1 Fire Protection Walkdowns

a. Inspection Scope

The inspectors conducted fire protection inspections in the reactor building prior to plant startup and in the control building patio area. The areas were selected based on enclosing equipment important to safety and, in the case of the reactor building, areas not normally accessible during plant operation. The inspectors conducted plant walkdowns and verified the areas were as described in the fire hazard analysis report. The plant walkdowns included observations of combustible material control, fire detection and suppression equipment operability, and compensatory measures established for degraded fire protection equipment.

b. Findings

No findings of significance were identified.

.2 Fire Drill Observation

a. Inspection Scope

The inspectors observed two separate crew performances of the annual unannounced plant fire drills. The inspectors evaluated the fire brigade's readiness to fight fires in plant areas important to safety. The inspectors observed fire fighters donning protective clothing and self-contained breathing apparatus and observed the fire fighting techniques employed against the simulated fire. The inspectors evaluated the brigade leader's performance on the use of pre-plan strategies and communications with the fire team members and the main control room. The inspectors attended the post-drill critiques.

b. Findings

No findings of significance were identified.

R07 Heat Sink Performance

a. Inspection Scope

The inspector assessed the heat removal capability of the safety-related reactor building emergency coolers (RBECs) and the non-safety related, but important to plant operation, intermediate closed coolers (ICCs). The RBECs are designed to remove heat and to limit containment pressure following a design basis accident and are supplied with water from the dedicated reactor river (RR) water system. The ICCs remove heat from important normal plant systems including the reactor coolant pump seals, the control rod drives, and the letdown coolers, and are supplied by the nuclear service river (NR) water system.

As part of the inspection, the inspector reviewed NRC Generic Letter 89-13, "Service Water System Problems Affecting Safety-Related Equipment," and the licensee's responses; the results of the cooler inspections completed during the 14R outage, including the visual inspection of the water side of the "A" RBEC tubes, and the visual inspections of nuclear service river water side and the eddy current tube examinations of both ICCs; the results of the 14R outage RBEC air flow and reactor river water flow testing; and, engineering change requests 01-01169 and 01-01170 regarding RR pump inservice testing reference values.

b. Findings

No findings of significance were identified.

R12 Maintenance Rule Implementation

a. Inspection Scope

The inspectors verified AmerGen's maintenance rule implementation for the following areas:

- 'A' main vacuum startup problem that caused a degraded main condenser vacuum
- 'C' reactor building purge damper failure to close during engineered safeguards actuation system testing
- 'A' intake structure bar rake over travel
- 'B' decay heat removal system test valve (DH-V-20B) stem disc separation
- 'B' intake structure screen wash pump failure to operate in automatic due to a change in system operating procedure

The aspects of maintenance rule implementation inspected included safety significance classification, a(2) performance monitoring or a(1) goal setting and corrective actions, and maintenance preventable function failure determinations. The inspectors referenced 10 CFR 50.65, "Requirements for monitoring the effectiveness of maintenance at nuclear power plants," NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Plants," and AmerGen administrative procedure 1082, "NRC Maintenance Rule."

b. Findings

No findings of significance were identified.

R13 Maintenance Risk Assessments and Emergent Work Evaluation

a. Inspection Scope

The inspectors reviewed AmerGen's shutdown risk management for planned 'B' decay heat removal closed cooling water pump maintenance and scheduled engineered safeguards actuation system testing. The inspectors reviewed the risk assessment of these maintenance activities with respect to 10 CFR 50.65(a)(4). The inspectors referenced AmerGen administrative procedure 1082.1, "TMI Risk Management Program," and NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants."

b. Findings

No findings of significance were identified.

R14 Personnel Performance During Non-routine Plant Evolutions

a. Inspection Scope

The inspectors observed main control room operators perform a reactor plant startup and approach to criticality, and a main turbine roll. The inspectors reviewed operating procedures, evolution plans, contingency plans and observed crew briefings. The inspectors observed the higher risk portions of these evolutions.

b. Findings

No findings of significance were identified.

R15 Operability Evaluations

.1 Inadvertent loss of Vital Bus 'B'

a. Inspection Scope

On December 1, 2001, the B vital bus deenergized when its power source, a 120Vac static inverter, blew an input fuse. The inspectors reviewed the circumstances involving the inadvertent loss of the B vital bus and the continued operability of the inverters.

b. Findings

INTRODUCTION:

AmerGen failed to adequately correct a 120Vac inverters (inverters) unreliable condition. A modification to eliminate rapid cycling of the 120Vac inverters during transient voltage conditions was inadequate and ineffective for some potential engineered safeguards actuation system (ESAS) initiation scenarios. This finding is an apparent violation of 10CFR50 Appendix B, Criterion XVI, "Corrective Action," and the significance is to be determined.

SYSTEM DESCRIPTION:

The TMI safety-related electrical system includes two 4kV busses supplied by offsite power through auxiliary transformers or dedicated and standby emergency diesel generators. The 4kV busses supply large electrical motors and 480Vac busses through transformers. The 480Vac busses power smaller electrical loads and further supply motor control centers. The motor control centers contain numerous circuit breakers supplying individual loads. Five 120Vac static inverters (inverters) are powered from motor control centers and provide highly regulated power to vital busses. The vital busses power safety related protective systems and instrumentation. The inverters also have a backup dc power supply from the safety-related batteries improving reliability and continuity of the highly regulated power supply to the vital busses. Protective systems on the vital busses include the reactor protective system, the engineered safeguards actuation system, and the heat sink protection system. A loss of a single vital bus has minor impact on the plant. A loss of multiple or all vital busses causes a reactor trip, initiates ESAS, removes ESAS override capability, and affects control of emergency feedwater operation.

SUMMARY OF EVENTS:

AmerGen performed modifications during the refuel outage 1R14 to improve the reliability of the safety-related electrical system. New auxiliary transformers with automatic tap changer capabilities were installed. Transformers to the 480Vac busses were also modified to increase the supplied voltage at the 480Vac busses. The increased voltage improved the performance of some electrical loads. As part of the modification review process and before installation, AmerGen engineers considered the potential impact on the safety-related inverters. The engineers used inverter design documents to determine the impact of a higher input voltage supplied by the motor control centers to the inverters. No impact was identified. After the electrical system modifications were installed, the inverters began experiencing overvoltage transfers to the dc input power supply. The overvoltage transfer is designed to protect the inverter and continue its operation through the dc input. On some occasions the inverters blew an input fuse rendering the inverter inoperable and deenergizing the vital bus, (if not manually aligned to a non-preferred ac power source).

The engineers consulted with the inverter vendor and reviewed the potential causes of the blown fuse. The engineers determined that the transfer to dc occurred too slowly. The engineers also determined that the overvoltage condition at the inverter was occurring because inverter design characteristics earlier used to evaluate the electrical system modifications, were different than actually present.

The engineers designed a modification to remove the transfer delay to the station batteries and also delay automatic transfer back to the ac input source. The inverter modification was intended to ensure a more reliable transfer to the dc input and keep the inverter on dc until the ac input source was stable. The modification was installed on all five safety related inverters.

Subsequently, on December 1, 2001, during an emergency sequence and power transfer surveillance, the B and D inverters rapidly cycled between ac and dc input sources. The B inverter blew its input fuse and the B vital bus de-energized. The plant was still shutdown for refuel outage R14. The plant was in hot shutdown; core reload was complete and the reactor coolant system (RCS) was pressurized. The plant went above decay heat removal system entry conditions on November 30, 2001, and decay heat removal was provided by the feed and condensate system, the once through steam generators and the turbine bypass valves. The B vital bus de-energization did not negatively impact RCS inventory control, or affect reactivity management, and did not negatively impact decay heat removal provided by the power conversion system. Plant operators secured from the power load transfer surveillance and energized the B vital bus from a non-preferred ac power source within 52 minutes.

AmerGen reviewed the inverter operation before resuming emergency sequence and power transfer testing. AmerGen determined that the earlier inverter modification was not effective for the condition experienced. The earlier modification installed a delay that was determined by a diesel block loading signal. The modification did not consider conditions when ac is not lost during an engineered safeguards actuation, nor did it consider the higher operating voltages of the emergency diesel generator. Engineers developed a subsequent modification that required manual transfer back to the ac input source after any transfer to the dc input source. The manual transfer eliminated rapid

cycling between input sources and enabled operators to verify stable electrical conditions prior to transfer. AmerGen completed all five subsequent inverter modifications on December 4, 2001. The plant remained in hot shutdown conditions with the power conversion system providing decay heat removal from December 1, 2001, through December 4, 2001. AmerGen initiated a corrective action (CR00083476) to fully resolve the high input voltage condition at the inverters.

This finding is more than minor because five ac inverters that support vital instrumentation and control were returned to service with an inadequate modification and an unreliable condition. AmerGen determined that the inverter problem could have prevented the fulfillment of the emergency feedwater system and will be reportable through a licensee event report. Pending review of AmerGen's licensee event report to provide more details about the operability and availability of emergency feedwater, the significance of this issue is to be determined.

10CFR50, Appendix B, Criterion XVI, "Corrective Action," requires that measures shall assure that the cause of significant conditions adverse to quality is determined and corrective action taken to preclude repetition. Contrary to this requirement, AmerGen did not fully evaluate an unreliable safety-related inverter problem and assure adequate corrective actions to preclude repetition or prevent a loss of vital busses during high voltage conditions. AmerGen has entered this problem into its corrective action process (CR# 00090391). This apparent violation (AV) of 10CFR50, Appendix B, Criterion XVI, "Corrective Action," is being treated as an open item pending NRC review of the risk significance. (**AV 50-289/01-08-01**).

.2 Additional Surveillance Testing

a. Inspection Scope

The inspectors reviewed an additional operability evaluation for the increased time delay for block loading the 'B' motor driven emergency feedwater pump on the safety related electrical bus. AmerGen identified the increased time delay during refueling outage surveillance testing of engineered safeguards actuation system block loading circuit. The inspectors verified the condition was properly characterized, the past operability of the affected systems was properly justified, and there was no unrecognized increase in plant risk.

b. Findings

No findings of significance were identified.

R16 Operator Work-Aroundsa. Inspection Scope

The inspectors reviewed identified operator concerns and work-arounds, and the caution tag and equipment status tag databases. The inspectors also walked down equipment trouble tags in several risk important plant areas. The reviews were performed to determine the cumulative effect of equipment deficiencies on system performance, operator response, or increased likelihood for an initiating event.

b. Findings

No findings of significance were identified.

R19 Post-Maintenance Testinga. Inspection Scope

The inspectors reviewed post-maintenance tests performed by AmerGen in conjunction with the following outage work activities on risk significant equipment: five engineered safeguards actuation system relay replacements; and 'A' and 'B' decay heat removal river water pump shaft coupling replacements. The inspectors verified that the post-maintenance test procedures and test activities were adequate to verify operability and functional capability prior to the affected systems being returned to service.

b. Findings

No findings of significance were identified.

R22 Surveillance Testinga. Inspection Scope

The inspectors reviewed the following additional surveillance activities.

- low power physics testing
- emergency feedwater automatic start system test
- emergency diesel generator power transfer test

The emergency feedwater automatic start system test and the emergency diesel generator power transfer test involved risk significant systems. The low power physics testing was selected by the inspectors because it was an infrequent evolution and involved reactivity management. The inspectors observed portions of the selected surveillance tests and verified, based on the test results, that the systems met technical specification and procedural requirements. The inspectors reviewed AmerGen's corrective action process for problems identified during previous performances of the tests to determine if problems involving surveillance testing were being identified and resolved at an appropriate threshold.

b. Findings

No findings of significance were identified.

4 OTHER ACTIVITIES

OA1 Performance Indicator Verification

.1 Reactor Coolant System Specific Activity

a. Inspection Scope

The inspectors reviewed AmerGen's reactor coolant system specific activity performance indicator (PI) data submitted for the last four quarters. The inspectors reviewed reactor coolant system chemistry sample results and verified AmerGen was correctly reporting the performance indicator data as a percent of the technical specification limit.

b. Findings

No findings of significance were identified.

.2 RCS Leak Rate

a. Inspection Scope

The inspectors reviewed AmerGen's reactor coolant system leak rate PI data submitted for the last four quarters. The inspectors compared the reactor coolant system leak rate values recorded in plant operating logs against the PI data. The inspectors observed the control room operators conduct a leak rate calculation using the plant process computer in accordance with surveillance procedure 1303-1.1, "Reactor Coolant System Leak Rate."

b. Findings

No findings of significance were identified.

.3 Heat Removal Unavailability

a. Inspection Scope

The inspectors reviewed data submitted by AmerGen for calculating heat removal or emergency feedwater system unavailability. The data reviewed covered the reporting periods from July 1, 2000 through September 30, 2001. The inspector reviewed the control room log book entries, maintenance records, corrective action system documentation and AmerGen's maintenance rule unavailability data base.

b. Findings

No findings of significance were identified.

.4 Safety System Functional Failures

a. Inspection Scope

The inspectors reviewed TMI licensee event reports submitted within the previous year to verify that AmerGen had included all safety system functional failures (SSFF) in the SSFF PI.

b. Findings

No findings of significance were identified.

OA3 Event Follow-up

- .1 (Closed) Licensee Event Report (LER) 50-289/01-02-00: Reactor Coolant System Pressure Boundary Leakage Due to Stress Corrosion Cracks Found in Several Small Reactor Vessel Head Nozzle Penetrations. This LER describes the results, cause, and corrective actions associated with reactor vessel head penetration cracking that was discovered during the 14R outage in response to NRC Bulletin 2001-01. AmerGen's activities in response to NRC Bulletin 2001-01 were reviewed by inspectors using TI 2515/145 and were described in Sections 1R08, 4OA5, and Attachment A of NRC Inspection Report 50-289/01-07. The inspectors reviewed the LER onsite and determined that the information was consistent with the details described in NRC Inspection Report 50-289/2001-007 and also AmerGen's NRC Bulletin 2001-01 Item No. 5 response dated January 7, 2002. AmerGen entered the reactor vessel head penetration cracking issues into its corrective action program as CAP T2001-0818 and CAP T2001-0818. This event did not constitute a violation of NRC requirements.
- .2 (Closed) Licensee Event Report 50-289/01-03-00: Degraded Once Through Steam Generator (OTSG) Tube. This LER describes the root cause, extent of condition, and corrective actions for both A and B OTSGs after AmerGen discovered a severed B OTSG tube during the 14R outage. The severed tube was significant because the tube had been previously plugged and not severed in 1986. The severed tube subsequently degraded adjacent inservice tubes. A special inspection was performed and the results documented in NRC Inspection Report 50-289/01-12. The inspectors reviewed the LER onsite and determined that the information was consistent with the details described in NRC Inspection Report 50-289/01-12. AmerGen entered the OTSG severed tube problems in the corrective action program as CR00079557. This event did not constitute a violation of NRC requirements.
- .3 (Closed) Unresolved Item 50-289/01-07-04: Determination of Responsibility for Operability of Siren Actuation System. The Lancaster County sirens were reported by the licensee to be inoperable from October 5 until October 9, 2001 due to an inadvertently deactivated transmitter which was located at the Lancaster County 911 center. No one was aware of the siren status during this period. The problem was discovered by the licensee contractor conducting the weekly silent test on October 9, 2001. The contractor notified the county who reactivated the transmitter and thus

returned the sirens to an operable status. The sirens are the primary method for notification of the public during a radiological emergency at the TMI station. The sirens are necessary to meet the requirement of planning standard 10 CFR 50.47(b)(5) which pertains to public notification. This issue was unresolved pending the determination of the availability of the means to notify the public if an emergency had occurred.

The NRC has since determined through the licensee's apparent cause investigation and interviews with their siren specialist that the public could have been notified of an emergency during the period of October 5-9, 2001. Had a siren activation been required during this period, the sirens would have been activated manually. Personnel designated to activate the sirens are trained, and governed by procedure, to monitor the computer screen to await feedback from the sirens. If sirens do not activate, then route alerting is performed in the effected areas. Therefore, with the transmitter inoperable, the person initiating a siren activation would have detected the problem. He then would have informed county emergency officials that route alerting was required for the entire county. He would then contact the licensee contractor to trouble shoot the problem with the sirens. Based upon this information, the function of public notification would have been available via route alerting when it was determined that the sirens were inoperable. Appropriate corrective actions were taken by the licensee to preclude recurrence of this event at all of the surrounding risk counties and were entered into the corrective action program as CR00078239. This unresolved item does not constitute a violation of NRC requirements and is closed.

OA6 Management Meetings

Exit Meeting Summary

On January 11, 2002, the resident inspectors presented the inspection results to members of AmerGen management led by Mr. Gellrich. The heat sink performance inspection results were previously presented to members of AmerGen Management. AmerGen acknowledged the findings presented. AmerGen did not indicate that any of the information presented at the exit meetings was proprietary.

OA7 Licensee Identified Violations

The following findings of very low safety significance were identified by AmerGen and are a violation of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as non-cited violations (NCV):

- **NCV 50-289/01-08-02** . Technical Specification 6.8, Procedures and Programs, requires written procedures be established, implemented, and maintained in accordance with Regulatory Guide 1.33, Quality Assurance Program Requirements. Appendix A to Regulatory Guide 1.33 requires, among other items, maintenance that can affect the performance of safety-related equipment be performed in accordance with written procedures, documented instructions, or drawings. Contrary to this requirement, maintenance technicians improperly reassembled the A decay heat pump bearing stiffener after pump seal repairs

using insufficient instructions. The pump was returned to service and the improperly assembled bearing stiffener impacted pump vibration. This issue was more than minor because long term operation of the risk-significant pump was jeopardized. AmerGen entered this problem in the corrective action process (CR# 00081907).

- **NCV 50-289/01-08-03** . Technical Specification 6.8, Procedures and Programs, requires written procedures be established, implemented, and maintained in accordance with Regulatory Guide 1.33, Quality Assurance Program Requirements. Appendix A to Regulatory Guide 1.33 requires, among other items, that operating from cold shutdown to hot standby be performed in accordance with written procedures. Contrary to this requirement, operators did not adhere to operating procedure 1102-1, "Plant Heatup to 525°F" and did not reduce plant heatup rate after once through steam generator tube to shell differential temperature exceeded +50°F. This issue was more than minor because plant operators exceeded a limit designed to protect the reactor coolant system boundary. AmerGen entered this problem in the corrective action process (CR# 00084683).

ATTACHMENT A**SUPPLEMENTAL INFORMATION**a. Key Points of Contact

D. Atherholt, Shift Operations Superintendent
 G. Gellrich, Plant Manager
 D. McDermott, Director, Maintenance
 J. McElwain, Manager, Regulatory Assurance
 S. Queen, Senior Manager, Plant Engineering
 J. Robertson, Plant Operations Director
 J. Stanley, Acting Director, Site Engineering
 M. Warner, Former Vice President, TMI Unit I

b. Items Opened, Closed, and DiscussedOpened

50-289/01-08-01	AV	Inadequate Corrective Actions for Safety-Related Inverter Problems
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Opened and Closed

50-289/01-08-02	NCV	Failure to Follow Procedure During Decay Heat Pump Reassembly
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50-289/01-08-03	NCV	Failure to Follow Procedure During Reactor Coolant System Heatup
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Closed

50-289/01-02-00	LER	Reactor Coolant System Pressure Boundary Leakage Due to Stress Corrosion Cracks Found in Several Small Reactor Vessel Head Nozzle Penetrations
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50-289/01-03-00	LER	Degraded Once Through Steam Generator Tube
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50-289/01-07-04	URI	Determination of Responsibility for Operability of Siren Actuation System
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c. Acronyms

14R	Cycle 14 Refueling Outage
ADAMS	Agencywide Documents and Management System
ALARA	As Low As Reasonably Achievable
AmerGen	AmerGen Energy Company, LLC

AV	Apparent Violation
CAP	Corrective Action Process
CFR	Code of Federal Regulations
DRS	Division of Reactor Safety
EFW	Emergency Feedwater
ESAS	Engineered Safeguards Actuation System
ICC	Intermediate Closed Cooler
IR	Inspection Report
LER	Licensee Event Report
NCV	Non-cited Violation
NR	Nuclear Service River Water
NRC	Nuclear Regulatory Commission
OTSG	Once Through Steam Generator
PI	Performance Indicator
RBEC	Reactor Building Emergency Cooler
RCS	Reactor Coolant System
RR	Reactor River Water
SDP	Significance Determination Process
SSFF	Safety System Functional Failure
TMI	Three Mile Island, Unit 1
TS	Technical Specification
URI	Unresolved Item