UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET SW SUITE 23T85
ATLANTA, GEORGIA 30303-8931

October 15, 2001

Duke Energy Corporation
ATTN: Mr. H. B. Barron
Vice President
McGuire Nuclear Station
12700 Hagers Ferry Road
Huntersville, NC 28078-8985

SUBJECT: MCGUIRE NUCLEAR STATION - NRC INTEGRATED INSPECTION REPORT 50-369/01-03 AND 50-370/01-03 AND INDEPENDENT SPENT FUEL STORAGE INSTALLATION INSPECTION REPORT 72-38/01-03

Dear Mr. Barron:

On September 15, 2001, the NRC completed an inspection at your McGuire Nuclear Station. The enclosed report documents the inspection findings which were discussed on September 24, with Mr. Dhiaa M. Jamil and other members of your staff.

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

Based on the results of this inspection, the inspectors identified two issues of very low safety significance (Green). These issues were determined to involve violations of NRC requirements. However, because of their very low safety significance and because they have been entered into your corrective action program, the NRC is treating these issues as non-cited violations, in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you deny these non-cited violations, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, to the United States Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with copies to the Regional Administrator, Region II; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the McGuire facility.

Since September 11, 2001, your staff has assumed a heightened level of security based on a series of threat advisories issued by the NRC. Although the NRC is not aware of any specific threat against nuclear facilities, the heightened level of security was recommended for all nuclear power plants and is being maintained due to the uncertainty about the possibility of additional terrorist attacks. The steps recommended by the NRC include increased patrols, augmented security forces and capabilities, additional security posts, heightened coordination with local law enforcement and military authorities, and limited access of personnel and vehicles to the site.

The NRC continues to interact with the Intelligence Community and to communicate information to you and your staff. In addition, the NRC has monitored maintenance and other activities which could relate to the site's security posture.

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 (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/NRC/ADAMS/index.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Robert C. Haag
Reactor Projects Branch 1
Division of Reactor Projects

Docket Nos. 50-369, 50-370, 72-38
License Nos. NPF-9, NPF-17

Enclosure: NRC Integrated Inspection Report 50-369/01-03, 50-370/01-03, 72-38/01-03

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U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos:	50-369, 50-370, 72-38
License Nos:	NPF-9, NPF-17
Report No:	50-369/01-03, 50-370/01-03, 72-38/01-03
Licensee:	Duke Energy Corporation
Facility:	McGuire Nuclear Station, Units 1 and 2
Location:	12700 Hagers Ferry Road Huntersville, NC 28078
Dates:	June 17, 2001 - September 15, 2001
Inspectors:	S. Shaeffer, Senior Resident Inspector E. DiPaolo, Resident Inspector M. Franovich, Resident Inspector R. Carroll, Senior Project Engineer (Section 1R06) D. Jones, Senior Health Physicist (Sections 2OS3, 2PS1, 2PS3, 4OA1, and 4OA5) W. Sartor, Senior Emergency Preparedness Inspector (Sections 1EP1, 1EP4, and 4OA1) W. Bearden, Reactor Inspector (Section 1R07)
Approved by:	Robert C. Haag Projects Branch 1 Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000369-01-03, IR05000370-01-03, IR07200038-01-03 on 06/17/01 - 09/15/2001, Duke Energy Corporation, McGuire Nuclear Station, Units 1 & 2. Flood protection measures and operability evaluation.

The inspection was conducted by resident inspectors and regional inspectors. The inspection identified two Green findings, which were non-cited violations. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using the Significance Determination Process (SDP) found in Inspection Manual Chapter 0609. Findings to which the SDP does not apply are indicated by "No Color" or by the severity level of the applicable 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/NRR/OVERSIGHT/index.html.

A. Inspector Identified Findings

Mitigating Systems

- (Green) A non-cited violation of Technical Specifications (TS) 5.4.1.a. was identified involving degradation of the flood mitigation function for the emergency diesel generator (EDG) areas. Specifically, the inspectors identified that station personnel responsible for implementing compensatory measures for flood protection on July 10, 2001, were not cognizant of their responsibilities and that the associated flood protection procedures were inadequate to ensure timely closure of a flood door protecting the Unit 1 EDGs from a design basis turbine building flood.

  This condition was assessed over a six hour time period on July 10, 2001, as well as similar periods of time over the last 18 months when the subject door in either unit was opened without any discernable compensatory action in place. This finding was determined to be of very low safety significance (Green). This was due to the relatively small period of duration per year, and the minimal effects that turbine building flooding would have on the availability of offsite power for those periods in question. (Section 1R06)

- (Green) A non-Cited Violation of TS 5.4.1.a. was identified for an inadequate surveillance procedure, which resulted in the operation of Unit 1 with a significant quantity of gas in the emergency core cooling system (ECCS) beneath the ECCS recirculation sump valves. This unknown condition adverse to quality existed for approximately 21 days. The procedure failed to provide adequate instructions such that the timing of ECCS venting, as required by Technical Specification Surveillance Requirement 3.5.2.3., was coincident with system conditions which would facilitate adequate venting. The licensee's initial review of this condition failed to adequately address the potential consequences of the gas in the ECCS system nor was the cause of the gas fully evaluated.

  The finding was more than minor because it could have had a credible impact on safety by reducing the reliability of the ECCS system by the ingestion of gas through the ECCS pumps. Additionally, if left uncorrected, a slightly higher gas accumulation could result in

redundant trains of the ECCS being inoperable. The finding was of very low safety significance because mitigation systems were concluded to be past operable based on the engineering analysis performed. (Section 1R15.2)

B. Licensee Identified Violations

One violation of very low significance (Green) which was identified by the licensee has been reviewed by the inspectors. Corrective actions taken or planned by the licensee appear reasonable. The violation is listed in section 4OA7 of this report.

Report Details

Summary of Plant Status:

Units 1 and 2 began the inspection period at 100 percent power. On July 16, 2001, an automatic reactor trip occurred on Unit 2 which was caused by human error during calibration on the steam generator 'B' steam line pressure loop. The human performance problem inadvertently completed the 2 out of 3 logic for the affected loop and a low steam line pressure signal closed all main steam line isolation valves (MSIVs), which caused an overtemperature Delta-T reactor trip. The Unit was returned to 100% power on July 19, 2001. Both units operated at 100% power through the end of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R04 Equipment Alignment

a. Inspection Scope

For the systems identified below, the inspectors reviewed plant documents to determine correct system lineup, and conducted partial system walkdowns to verify that the systems were correctly aligned.

- Unit 1 Auxiliary Feedwater System
- 1A Emergency Diesel Generator (EDG)
- Units 1 and 2 Control Room Ventilation

The inspectors assessed conditions such as equipment alignment (i.e., valve positions, damper position, and breaker alignment) and system operational readiness (i.e., control power and permissive status) that could affect operability of these systems. In addition, the walkdowns included a limited review of breaker red tags, evaluation of room and cubicle ventilation, and an evaluation to determine if relay and other breaker/bus protective devices are set in accordance with associated operations procedures, maintenance procedures, and the Updated Final Safety Analysis Report (UFSAR).

b. Findings

No findings of significance were identified.

1R05 Fire Protection

.1 Fire Drill Observations

a. Inspection Scope

On August 28, 2001, the inspectors monitored an announced quarterly shift fire drill. The purpose of the inspection was to monitor the fire brigade's use of protective equipment and fire fighting equipment, to verify that fire fighting pre-plan procedures and appropriate fire fighting techniques were used, and to verify that the directions of the fire brigade leader were thorough, clear, and effective. The inspectors also reviewed drill critiques and evaluations to ensure they were critical and identified appropriate areas for licensee followup.

b. Findings

No findings of significance were identified.

.2 Fire Protection Walkdowns

a. Inspection Scope

The inspectors assessed the adequacy of the fire protection program implementation, by touring the following risk significant areas. While touring these areas, the inspectors assessed transient combustible material control, visible material condition and lineup of fire detection and suppressions systems, status of manual fire equipment, and condition of passive fire barriers.

- Units 1 and 2 ND/NS Rooms
- Safe Shutdown Facility (SSF)
- 1A EDG
- Units 1 and 2 Cable Spreading Rooms
- Units 1 and 2 Service Water Pump Areas
- Units 1 and 2 Component Cooling Water Pump Areas

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures

a. Inspection Scope

The inspectors assessed the flooding mitigation plans and equipment related to the Unit 1 and 2 EDG areas to determine if they were consistent with design requirements and risk analysis assumptions. Included in this assessment determination were sources of potential flooding (i.e., from internal piping systems and adjacent areas); operability of related sump pumps and level alarms; adequacy of credited flood barriers; and appropriateness of credited human recovery/compensatory actions, particularly those relied upon during the 1B EDG fuel oil spill cleanup activities on July 10, 2001.

Licensee problem identification and resolution was also assessed by determining if flood-related problems identified during the inspection, as well those identified at other times by the licensee, were appropriately entered into their corrective action program and properly addressed for resolution. The Problem Investigation Process reports (PIPs) reviewed are listed at the end of the report.

b. Findings

A Green finding, involving degradation of the flood mitigation function for EDG areas, was identified and dispositioned as a non-cited violation (NCV).

On July 10, 2001, with Unit 1 at 100 percent power, the licensee discovered that the fuel oil day tank in the 1B EDG room was overflowing. This was attributed to a failed level switch (failed low) which caused the fuel transfer pump to auto-start and fill the day tank from the underground fuel oil tank. During the subsequent cleanup activities, the inspectors observed that the double maintenance/equipment door separating the Unit 1 EDG area from the turbine building basement was open. In addition, the inspectors observed that the door's path was blocked with hoses and three 55 gallon drums that were filled with the spilled fuel oil recovered during the cleanup effort. Located near high-energy feedwater and steam lines, this approximately 8 foot wide by 18 foot tall submarine type double door serves multiple hazard barrier functions for the EDGs, which are located several feet below the turbine building basement grade level. Accordingly, the inspectors questioned personnel in the area (i.e., operators and a security/fire watchstander) as to what compensatory measures were in effect for the open door. Station personnel at the job site were not aware of their responsibilities in the event of flood, nor did they receive any related instructions in their pre-job briefing.

The inspectors discussed the situation with the day shift operations shift manager (OSM). The OSM indicated that the job site personnel should have known that there were both fire protection and flood compensatory measures required per Nuclear System Directive (NSD) 316, Fire Protection Impairment and Surveillance, Appendix A.316, Impairment and Compensatory Measures Form (ICMF). Subsequent investigation revealed that the back-shift personnel had failed to inform the day-shift personnel of the flood compensatory measures during their shift turnover briefing. Consequently, according to plant records, the subject door was open for approximately six hours without a compensatory flood watchstander. This failure to implement compensatory flood measures per the effective NSD 316, Appendix A.316 ICMF (an

administrative procedure recommended by Regulatory Guide 1.33) is in violation of Technical Specification (TS) 5.4.1.a.

The ICMF in effect for the subject door on July 10, 2001, stated, “For flood concerns [the] door must be able to be closed within 40 minutes of a pipe break in the Turbine building.” In contrast, during previous maintenance activities controlled by a complex maintenance plan (under Maintenance Directive 2.5), the compensatory flood measures for the subject door in either unit were very specific; including among other things, a requirement for the door to remain unobstructed to allow for fast closure if needed. As previously indicated, on July 10, 2001, the subject door was blocked open with three 55 gallon drums of oil; an impairment to closing the door that was neither prohibited nor addressed by the ICMF in effect. For this reason, as well as for the discrepancy addressed below concerning the lack of the 40-minute compensatory flood response action time (actually only a 20-minute response time was available), the NSD 316, Appendix A.316 ICMF that was in effect on July 10, 2001, was determined to be inadequate; and therefore, in violation of TS 5.4.1.a.

Control room response for isolating/controlling the design turbine building flood (i.e., a failure of one of the circulating water system expansion joints connected to the main condenser) is directed by Abnormal Procedure AP/0/A/5500/44, Plant Flooding, Revision 1. Enclosure 8 of this procedure directs the control room operators to make sure the subject EDG maintenance/equipment door in either unit is shut within 40 minutes* of the flood event; which, according to UFSAR Section 10.4.5.3, is based on the existence of a 1.25 foot curb in front of all auxiliary building doors (inclusive of the EDG areas). However, a walkdown of the turbine building/EDG area interfacing wall in both units revealed that the credited curbing does not exist for either unit’s EDG maintenance/equipment doors. In accordance with UFSAR Section 10.4.5.3, this would reduce the Unit 1 time frame available to operators, as well as the compensatory flood watchstander, from 40 to approximately 20 minutes* to shut the subject door; thereby making AP/0/A/5500/44 (an abnormal procedure recommended by Regulatory Guide 1.33) inadequate and in violation of TS 5.4.1.a. Consequently, this inadequacy potentially eliminates the control room operators as a viable backup to an unaware compensatory flood watchstander like that on July 10, 2001, since during the last 20 of the 40 minutes* allowed for door isolation in AP/0/A/5500/44, turbine building flood waters would be going into the Unit 1 EDG area through the subject blocked open doorway. (*Note: as identified subsequent to this inspection in PIP M-01-04091, differences in turbine building sump configurations could make flood response times in Unit 2 even less.)

The inadequate compensatory flood measures (i.e., watchstander and operator backup) described above have had a credible impact on safety, for they involved the loss/ degradation of equipment/function designed to mitigate a flooding initiating event. Based on a Unit 1 turbine building flood estimate of approximately 68,000 gallons per minute (146,000 cubic-feet/foot at 0.061 feet/minute - per UFSAR Section 10.4.5.3) over the 20 minutes in question, it is conceivable that the capacity of the two 1B and two 1A EDG safety related sump pumps (450 gallons per minute each) could be exceeded; thereby rendering both EDGs inoperable. Consequently, a significant determination process (SDP) directed Phase 3 screening analysis was performed to assess the six hours of interest on July 10, 2001, as well as similar periods of time over the last

18 months when the subject door in either unit was opened without any discernable compensatory action in place. The result of this Phase 3 screening analysis indicated that this issue was of very low safety significance (Green) due to the relatively small period of duration per year, and the minimal effects that turbine building flooding would have on the availability of offsite power for those periods in question.

The three TS 5.4.1.a violation examples identified above have been captured in the licensee's corrective action program as PIPs M-01-3210 and M-01-3250. Accordingly, these examples are being treated as a NCV consistent with Section VI.A.1 of the NRC Enforcement Policy and is identified as NCV 50-369,370/01-03-01: Inadequate Compensatory Measures Result in Degradation of Flood Mitigation Function for EDG Areas.

1R07 Heat Sink Performance

a. Inspection Scope

The inspector reviewed implementation of licensee programs, tests, and inspection activities to assess the integrity and operability of the Component Cooling System (KC), Diesel Generator Engine Cooling Water (KD) heat exchangers and the Nuclear Service Water System (RN). This included review of documentation, discussions with system engineers, and field observations. The inspector reviewed documentation to verify that the licensee continued to meet commitments for Generic Letter 89-13, Service Water System Problems Affecting Safety Related Equipment. In addition, the inspector reviewed licensee actions associated with recent problems experienced with Asiatic clams in raw water cooling systems at other nuclear facilities. Additionally, the inspector reviewed the most recent completed underwater service water structure inspection and eddy current examination results to monitor for degradation of tubes in the KC System heat exchangers.

The inspector also reviewed documentation to determine if ongoing heat exchanger inspection/maintenance activities, test methodology, system performance monitoring, operational guidance, and system chemical treatments were consistent with accepted industry practices.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification

a. Inspection Scope

The inspectors reviewed licensed operator requalification performance, training, and associated training documentation to verify that performance deficiencies had been addressed through the requalification training program. Specifically, the inspectors reviewed activities concerning the requalification training for Abnormal Procedure (AP) 7, Loss of Offsite Power, conducted on September 12, 2001.

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation

a. Inspection Scope

For the equipment issues described in the PIPs listed below, the inspectors reviewed the licensee's implementation of the Maintenance Rule (10 CFR 50.65) with respect to the characterization of failures, the appropriateness of the associated a(1) or a(2) classification, and the appropriateness of either the associated a(2) performance criteria or the associated a(1) goals and corrective actions.

PIP Number	Title/Description.
M-01-2466	Drain lines on 1B and 2B auxiliary building ventilation (VA) supply fans degraded resulting in condensate backup
M-01-3154	2SA-49 (TDAFW steam supply) failure to stroke as expected during Unit 2 reactor trip response
M-01-3179	Unit 1 annulus sprinkler header failure to open (1RF-27)
M-01-2630	Overcurrent relay actuation during slave relay testing on 2 ETB-11
M-01-1851	Stroke time deficiencies for 1CF-32, 1A SG control valve, during ESF train A test, PT/1/A/4200/009A
M-01-1950	Pressurizer heater group C not capable of maintaining RCS pressure

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation

a. Inspection Scope

The inspectors reviewed the licensee's implementation of plant risk and configuration controls as related to removing from service, due to emergent or planned work activities, structures, systems, and components (SSCs). The SSCs, which are listed below, were within the scope of the maintenance rule or identified as risk-significant. Emphasizing potential high risk configurations and high priority work items, the inspectors evaluated the following: (1) effectiveness of the work prioritization and control; (2) assessment of integrated risk of the work backlog; and (3) safety assessments and/or management activities performed when SSCs are taken out of service. The inspectors reviewed the

licensee's implementation of Maintenance Rule (10 CFR 50.65) a(4), with respect to risk assessments for work activities.

PIP Number/ Work Order (WO)	Title/Description
M-01-3454	Numerous High Delta pressure alarms on service water strainers due to shad collecting in strainers
M-01-3080	1A and 1B isolated phase bus fans bearings degraded
M-01-3210	EDG 1B fuel oil overflow from day tank (opening of flood doors resulted in inadequate compensatory measures as described in Section 1RO6)
M-01-2818	Potential for 2C main steam isolation valve (MSIV) to inadvertently close during 2EMXA breaker functional test
M-01-3235	1A2 MSR first stage inlet check valve significant turbine oil leak
M-01-3619	Degraded instrument air heater hoses resulting in inoperable diesel VI compressors

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Nonroutine Plant Evolutions

a. Inspection Scope

The inspectors reviewed the operating crews' performance during the following non-routine evolution and transient conditions to determine if the response was appropriate to the event and in accordance with procedures and training. Operator logs, plant computer data, and associated operator actions were reviewed. Additional reviews are documented in Section 4OA3.

PIP Number	Title/Description
M-01-3139	Operator response following inadvertent MSIV closure and subsequent reactor trip

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed selected operability evaluations affecting risk significant SSCs listed below to assess the technical adequacy of the evaluations. Where compensatory measures were involved, the inspectors also determined whether the compensatory measures were in place, would work as intended, and were appropriately controlled.

PIP Number	Title/Description
M-01-2284	Gas identified during first post-outage Emergency Core Cooling System (ECCS) Venting
M-01-2769	Degraded boraflex requires reclassification of spent fuel storage racks in Unit 1 Spent Fuel Pool
M-01-2854	Unit 1 containment divider barrier hatch found unsecured (see Section 4OA7)
M-01-3144	Steamline code safety valves 2SV2-2SV21 did not immediately reclose as expected during Unit 2 reactor trip event
M-01-3148	Main steam supply valve 2SA-49 to TDAFW pump did not open in acceptable time frame following U2 reactor trip. 1-SA-49 operability included.
M-01-3931	Incorrectly installed Cutler-Hammer relay terminations

b. Findings

A Green Finding that was dispositioned as a non-Cited Violation of TS 5.4.1.a. was identified for an inadequate surveillance procedure, which resulted in the operation of Unit 1 with a significant quantity of gas in the ECCS beneath the ECCS recirculation sump valves.

On May 4, 2001, with Unit 1 operating in Mode 1, abnormal amounts of gas were identified at four vent locations while performing PT/1/A/4200/19, ECCS Pumps and Piping Vent, Revision 31, as required by TS SR 3.5.2.3. The venting of the gas verified current operability of the ECCS trains. PIP M-01-2284 was initiated to determine past operability and potential corrective actions. The PT was last performed with the unit shutdown on April 12, 2001, with no substantial amounts of gas being identified. The inspectors focused the inspection on the areas where identified gas could have been safety significant. Maintaining the ECCS full of water ensures the system will be able to inject its full capacity upon demand and prevents water hammer, pump cavitation, and pumping of non-condensible gases into the reactor vessel.

The inspectors reviewed the past operability completed for the gas identified beneath 1ND-97 and 1ND-98 in PIP M-01-2284. No root cause determination was performed

and no estimate was made on the quantity of vented gas. The PIP concluded that the gas would not be an operability issue because once the normally closed valves were opened upon ECCS swapover to the containment sump, the gas would be vented out through the sump to the containment atmosphere. Upon reviewing the details of this past operability, the inspectors concluded that the licensee had not adequately considered key design features which may have forced the identified gas to the ECCS pumps' suction during sump swapover, rather than through the sump to the containment atmosphere as originally concluded. The factors not effectively considered included: use of an inaccurate post LOCA containment flood level; increased containment volume due to the increased reactor coolant system (RCS) volume following steam generator replacement; increased ice condenser volume due to higher ice loading; and higher swapover level recently incorporated for the refueling water storage tank (RWST).

Upon considering these factors, the licensee reevaluated past operability and initiated a root cause investigation to identify the effect of the gas should it be swept to the ECCS pump suctions, and the source of the gas at all the identified vent locations. The inspectors considered the licensee's subsequent review of the identified gas more thorough. Specific investigation of the gas identified at the sump valves estimated a volume of 37 standard cubic feet at each location. For the high head injection pumps, vendor operability limits included a 1.0 cubic foot limit for slug flow and a 5 percent void fraction operational limit. The licensee's subsequent analysis for large and small break loss-of-coolant accident (LOCA) conditions, with the estimated amount of gas present, concluded that the high head injection pumps could ingest up to 0.54 and 0.49 cubic feet of slug flow, respectively, which is bounded by the operability limit of 1.0 cubic feet. Due to the complexity of the hydraulic system, the licensee did not calculate whether the high head pumps would have exceeded the 5 percent void fraction limit. However, the licensee recognized with the amount of gas discovered, that the timeframe the pumps would be exposed to gas voiding would be limited. The source of the gas identified below the containment sump valves was determined to be completion of the outage ECCS venting coincident with RHR being inservice. This pressurized condition kept the gas in solution, unable to be properly vented.

The inspectors concluded that PT/1/A/4200/19 failed to provide adequate instructions such that the timing of ECCS venting as required by TS Surveillance Requirement 3.5.2.3. was coincident with system conditions which would facilitate adequate venting. A violation of TS 5.4.1.a. was identified for an inadequate surveillance procedure, which resulted in the operation of Unit 1 with a significant quantity of gas in the ECCS beneath the ECCS recirculating sump valves. This unknown condition adverse to quality existed for approximately 21 days following startup of the unit from the end-of-cycle 14 refueling outage.

The finding was more than minor because it could have had a credible impact on safety by reducing the reliability of the ECCS by ingestion of gas through the ECCS pumps. Additionally, if left uncorrected, a slightly higher gas accumulation could result in redundant trains of the ECCS being inoperable. The finding was of very low safety significance because mitigation systems were concluded to be past operable based on the engineering analysis performed. This issue is captured in the licensee's corrective action program as PIP M-01-2284. Because the finding is of very low safety significance and the finding was captured in the licensee's corrective action program, this finding is being treated as a

Non-Cited Violation, consistent with Section VI.A.1 of the NRC Enforcement Policy and identified as NCV 50-369/01-03-02: Inadequate ECCS Venting Procedure Results in ECCS Piping Voids.

1R16 Operator Workarounds

a. Inspection Scope

The inspectors evaluated the selected operator workaround listed below for potential affects on the functionality of mitigating systems. The workaround was reviewed to determine: (1) if the functional capability of the system or human reliability in responding to an initiating event was affected; (2) the effect on the operator's ability to implement abnormal or emergency procedures; and (3) if operator workaround problems were captured in the licensee's corrective action program.

M-01-2720	Inaccurate EDG voltage meters requiring voltage adjustment (operator work around 01-06).

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (PMT)

a. Inspection Scope

The inspectors reviewed PMT procedures and/or observed testing activities for the equipment below to determine if the equipment was returned to service satisfactorily. The inspectors evaluated the PMT to ensure it properly addressed the work performed and that equipment functional capabilities were adequately verified.

Procedure/WO Number	Title/Description
PT/0/A/4601/008A	Reactor trip breaker response time testing
PT/1/A/4600/03C	Reactor vessel level indication testing following E1 work request for out of range condition
WO98334208	Pressure switch actuation verification for valve 1CA-161C
PT/2/A/4252/001	Turbine Driven CA pump performance test following modification to activator on valve 2SA49

WO98328013	2EMXA-3A breaker functional test following breaker maintenance
WO9836630	2RN (nuclear service water) heat exchanger inspection

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

.1 Routine Surveillance Testing

a. Inspection Scope

The inspectors witnessed surveillance tests and/or reviewed test data of selected risk-significant SSCs listed below, to assess, as appropriate, whether the SSCs met TS requirements, UFSAR, and licensee procedure requirements. The inspectors also determined if the testing effectively demonstrated that the SSCs were operationally ready and capable of performing their intended safety functions. Compensatory measures, where applicable, were also verified.

Procedure/WO	Title/Description
PT/2/A/4150/001B	Reactor coolant system leakage calculation
PT/1/A/4350/002B	EDG 2B operability test
WO 98401385	1B SSPS 7300 testing
PT/1,2/A/4252/001R	As-found stroke time testing for 1SA-48ABC and 2SA-49 performed on air operated valve design margin
WO 98217093	Fire pump surveillance testing
PT/1/A/4350/002A	EDG 1A operability test

b. Findings

No findings of significance were identified.

.2 Inservice Surveillance Testing

a. Inspection Scope

During PT/2/A/4403/001A, 2A, “Service Water Pump Performance Test,” the inspectors reviewed applicable valve stroke testing, pump vibration data, instrument calibration, and effectiveness of the licensee’s American Society of Mechanical Engineers (ASME)

Section XI testing program. The inspectors evaluated compliance with ASME code requirements, reviewed test methods and results, acceptance criteria, test instrument range/accuracy, and compliance with TS action statements/reporting requirements. The inspectors also verified that pump conditions were not indicative of a need for increased testing requirements.

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications

a. Inspection Scope

The inspectors reviewed the following temporary modifications (MGTM) to determine whether system operability and availability were affected, that configuration control was maintained, and that post-installation testing was performed.

Modification Number	Title/Description
MGTM-0210	Installation of temporary ground monitoring on 1 ELXA for ground source identification
MGTM-0216	Booster springs added to actuator for Unit 1 and 2 SA-48,49 valves (TDAFW steam inlet) to increase design margins

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP1 Exercise Evaluation

a. Inspection Scope

The inspectors reviewed the objectives and scenario for the McGuire Nuclear Plant biennial, full-participation 2001 emergency response exercise to determine whether they were designed to suitably test major elements of the licensee's emergency plan.

During the period August 13-16, 2001, the inspectors observed and evaluated the licensee's performance in the exercise, as well as selected activities related to the licensee's conduct and self-assessment of the exercise. The exercise was conducted on August 14 from 8:00 a.m. to 1:49 p.m. Licensee activities inspected during the exercise included those occurring in the Control Room Simulator (CRS), Technical Support Center (TSC), Operational Support Center (OSC), and the Emergency Operations Facility (EOF). The NRC's evaluation focused on the risk-significant

activities of event classification, notification of governmental authorities, onsite protective actions, offsite protective action recommendations, and accident mitigation. The inspectors also evaluated command and control, the transfer of emergency responsibilities between facilities, communications, adherence to procedures, and the overall implementation of the emergency plan. The inspectors attended the post-exercise critique to evaluate the licensee's self-assessment process, as well as the presentation of critique results to plant management.

b. Findings

No findings of significance were identified.

1EP4 Emergency Action Level and Emergency Plan Changes

a. Inspection Scope

The inspector reviewed Revisions 01-1 and 01-2 dated January 25 and June 21, 2001, respectively, to the Emergency Plan against the requirements of 10 CFR 50.54(q) to determine whether any of those changes decreased plan effectiveness.

b. Findings

No findings of significance were identified.

1EP6 Drill Evaluation

a. Inspection Scope

In addition to the previously discussed exercise evaluation conducted in the control room simulator, the inspectors observed the emergency drill with an emphisis on evaluating operator proficiency in responding to the event from the control room, as well as identified areas for enhancements. Operator performance, emergency and abnormal procedure use and adherence, event classifications, drill objectives, post-drill critique, and problem identification and resolution were also evaluated.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety

2OS3 Radiation Monitoring Instrumentation

a. Inspection Scope

The inspectors evaluated the accuracy and operability of radiation monitoring instruments used for the protection of occupational radiation workers and the adequacy

of the program for providing workers with self-contained breathing apparatus (SCBA). The inspectors reviewed records for the most recent calibrations of six radiation monitoring instruments to determine whether the instrument calibrations were current. The instruments selected were 1-EMF-9, 39, 51A, 71 and 2-EMF-2 and 36. The inspectors examined alarm setpoint calculations for the selected instruments to determine whether the setpoints were established in accordance with TS and Updated Final Safety Analysis Report (UFSAR) requirements. The inspectors also verified that the instruments were operable and set to alarm at the established alarm setpoints. Calibration tags on ten portable survey instruments staged for use were examined to determine whether the calibrations were current. The available check sources were evaluated to determine whether they were appropriate for performing response checks of the selected instruments. The licensee's program for radiation monitoring instrumentation was evaluated for consistency with the requirements for surveys and monitoring delineated in 10 CFR 20 Subpart F and the licensee's implementing procedures.

The inspectors also evaluated the effectiveness of characterization and resolution of selected radiation monitoring related issues which had been entered into the licensee's corrective action program. Four PIP reports and three self-assessments were evaluated to determine whether substantive issues were identified, whether those issues were appropriately characterized with regard to risk significance, and whether adequate corrective actions were taken.

The inspectors toured the plant to determine whether SCBA were available at selected locations and whether equipment was available for refilling SCBA air bottles. The licensee's lesson plan, HS0113, for respiratory protection training was reviewed by the inspectors to determine whether it included adequate provisions for training personnel in the use of SCBA and for bottle replacement. The training records for randomly selected individuals who were currently on duty in the Control Room were reviewed to determine whether they had been trained and qualified in accordance with the lesson plan. The licensee's training program for the use of SCBA was evaluated for consistency with the respiratory protection training requirements delineated in 10 CFR 20 Subpart H.

The following licensee procedures and documents were examined during the inspection:

IP/1/A/3005/010	Radiation Monitoring System High Range Area Channel Calibration (1EMF36HH, 1EMF51A, and 1EMF51B)
IP/2/A/3005/010	Radiation Monitoring System High Range Area Channel Calibration (2EMF36HH, 2EMF51A, and 2EMF51B)
IP/0/B/3006/004A	RMS RP-86A Vertical (RD-32) Gas Monitor Transfer Calibration
IP/1/B/3006/009A	RMS RP-86A Low Range Process Channel Calibration
IP/1/B/3005/007A	RMS RP-86A Low Range Area Channel Calibration
IP/2/B/3005/007A	RMS RP-86A Low Range Area Channel Calibration
IP/1/B/3006/009B	RMS Nitrogen-16 Monitor Calibration
HP/0/B/1008/006	Respiratory Protective Equipment Maintenance and Storage
HS0113	Advanced Respiratory Protection (SCBA)
PIP Reports	M-00-01215, M-00-02300, M-01-00393, M-01-01125, M-01-01803, M-01-02707, and M-01-03276

b. Findings

No findings of significance were identified.

Cornerstone: Public Radiation Safety

2PS1 Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems

a. Inspection Scope

The inspectors reviewed the licensee's most recent Radioactive Effluent Release Report which delineated the quantities of radionuclides released in liquid and gaseous effluents during the calendar year (CY) 2000 and the radiation doses to the public resulting from those releases. The review included verification that the report included the information and data required to be reported to demonstrate conformance with 10 CFR 20.1302, 10 CFR 50.36a, and 10 CFR 50, Appendix I. The inspectors also verified that the calculation of the total body dose to a member of the public from the liquid effluents released during January 2001 was consistent with the methodology described in the Offsite Dose Calculation Manual (ODCM). The inspectors reviewed the recent changes to UFSAR Section 16.11 Radiological Effluent Controls and verified that those changes were evaluated pursuant to 10 CFR 50.59 when required. The inspectors toured the plant and verified that the major components of the radioactive effluent release and monitoring equipment was configured as described in Chapter 11 of the UFSAR. During the tours the inspectors verified that the following radioactivity monitors were in service as specified by the UFSAR: 1-EMF-31, 1-EMF-35, 1-EMF-36, 1-EMF-37, 1-EMF-44, EMF-49, EMF-50, and EMF-53. The inspectors verified that compensatory sampling and analyses were performed as required for randomly selected monitors which were out-of-service during the previous twelve months. The inspectors observed the collection and analysis of samples from a liquid radwaste batch release and from the Unit 1 Vent. The inspectors verified that the sampling, analytical, and liquid batch release procedures were followed. The inspectors reviewed the records for the most recent calibrations of selected effluent monitors and one gamma spectroscopic instrument in the count room and verified that their calibrations were current with respect to UFSAR requirements. The effluent monitors selected included 1-EMF-31, 1-EMF-35, 1-EMF-36, 1-EMF-37, EMF-49, and EMF-50. The inspectors reviewed the results of interlaboratory comparisons from the 2nd quarter of CY 2000 and the 1st quarter of CY 2001 for typical effluent samples and verified that the licensee had maintained the quality of analyses consistent with the program guidance provided by Regulatory Guide 4.15. The effectiveness of characterization and resolution of selected effluent monitoring related issues identified since April 2001 were evaluated by the inspectors.

b. Findings

No findings of significance were identified.

2PS3 Radiological Environmental Monitoring Program (REMP)

a. Inspection Scope

The inspectors reviewed the licensee's most recent Annual Radiological Environmental Operating Report which described implementation of the REMP during CY 2000 and provided an assessment of the program results. The review assessed whether the report included the information required to be reported regarding surveillance results, analysis of data, land use census, interlaboratory comparison program results, and permitted program deviations. The review also evaluated whether the REMP was implemented as required with respect to sampling locations, monitoring and measurement frequencies. The inspectors observed collection of air particulate filters and charcoal cartridges at four air sampling stations and collection of milk samples at three locations to determine whether the samples were collected in accordance the sampling procedures and whether good techniques were used. Calibration procedures and records for the each of the air sampling stations were reviewed to determine whether the calibrations were current. The inspectors also observed the location of five thermoluminescence dosimeters (TLDs) to determine whether they were located as described in the ODCM. Meteorological monitoring instrument calibration procedures and records were reviewed to determine whether instrument calibrations were current with respect to ODCM and UFSAR requirements. The inspectors assessed whether the instruments were operable and whether current meteorological conditions were available in the Control Room. Surveys of potentially contaminated materials being released from the RCA for unrestricted use were also observed. The inspectors assessed whether appropriate criteria were used for unrestricted release of potentially contaminated materials, whether appropriate instrumentation was used for those surveys, and whether the instruments were calibrated with appropriate sources. The effectiveness of characterization and resolution of selected REMP related issues identified by the licensee were evaluated by the inspectors to determine whether substantive issues were identified and adequately addressed. Through the above reviews and observations, the licensee's practices and implementation of their radiological monitoring program, meteorological monitoring program and radioactive material control program were evaluated by the inspectors for consistency with the ODCM, the UFSAR, TSs and 10 CFR Part 20 requirements.

The following licensee documents and procedures were examined during the inspection:

-Annual Radiological Environmental Operating Report for CY 2000
-UFSAR Chapter 2.3 Meteorology
-Laboratory Information Management System Report Numbers 20003013, 20020595, and 20038763
-ODCM, Revision 42
-Operational Radiological Environmental Sample Collection Program for McGuire Nuclear Station
-Selected Licensee Commitments Sections 16.7 and 16.11
- 317 Low Volume Air Sampler Calibration Procedure
-IP/0/B/3260/003 Met One Series 21 Wind Speed Module Channel Calibration

-IP/0/B/3260/001	Met One Series 21 Wind Direction Module Channel Calibration
-IP/0/B/3260/019	Met One Platinum RTD Model 21.32 Temperature and Delta Temperature Channel Calibrations
-SH/0/B/2000/006	Removal of Items From RCA/RCZ and Use of Release/Radioactive Material Tags

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification

.1 Mitigating Systems and Barrier Integrity PI Verification

a. Inspection Scope

The inspectors verified the following four Reactor Safety PIs for accuracy:

Cornerstone	PI
Mitigating Systems	Safety system functional failures
Mitigating Systems	Safety system unavailability, residual heat removal
Mitigating Systems	Safety system unavailability, emergency AC power system
Barrier Integrity	Reactor coolant system leak rate

To verify the PI data, the inspectors reviewed control room logs, TS Action Item Log entries, and maintenance rule data. The inspectors also noted that the licensee conservatively questioned whether the Unit 1 reactor trip event of July 16, 2001, constituted a PI initiating event with loss of normal heat sink. Industry feedback subsequently confirmed this event should be counted as a PI event.

b. Findings

No findings of significance were identified.

.2 Emergency Preparedness PI Verification

a. Inspection Scope

The inspectors reviewed licensee records to determine whether the submitted PI statistics (through the second quarter of 2001) were calculated in accordance with the guidance contained in Section 2.4 (Emergency Preparedness Cornerstone) of NEI 99-

02, Revision 1, "Regulatory Assessment Performance Indicator Guideline." The specific PIs reviewed included:

- Emergency Response Organization (ERO) Drill/Exercise The inspector assessed the accuracy of the PI for ERO drill and exercise performance (DEP) over the past eight quarters through review of drill and exercise records, and licensee exam records that provided DEP data. The inspector verified the PI value of 96.5% that was reported for the previous eight quarters ending June 2001.

- ERO Drill Participation The inspector assessed the accuracy of the PI for ERO drill participation during the previous eight quarters through review of the training records and training sign-in sheets for randomly selected individuals from the 175 total key personnel assigned to positions in the ERO as of the end of the second quarter of 2001. The inspector verified the PI value of 99.4% that was reported for the previous eight quarters ending June 2001.

- Alert and Notification System Reliability The inspector assessed the accuracy of the PI for the alert and notification system reliability through review of the siren tests for the previous 12 months. The inspector verified the PI value of 98.6% that was reported from July 2000 through June 2001.

b. Findings

No findings of significance were identified.

.3 Occupational and Public Safety PI Verification

a. Inspection Scope

The inspectors evaluated the accuracy of the PI data for the Occupational and Public Radiation Safety Cornerstones. Procedure SH/0/B/2006/001 NRC Performance Indicator Data Collection, Validation, Review, and Approval was evaluated by the inspectors for consistency with the guidance provided in NEI 99-02, Revision 1, Regulatory Assessment Performance Indicator Guideline. Monthly files generated pursuant to procedure SH/0/B/2006/001 were reviewed to determine whether the procedurally specified sources of information for the radiation safety PIs were collected each month and whether potential and actual PI occurrences were accurately assessed for reportability. The monthly files selected for review included January, March, May, and July 2001.

b. Findings

No findings of significance were identified.

4OA3 Event Followup

Unit 2 Reactor Trip and Restart Activities

a. Inspection Scope

Licensee performance was evaluated following a July 16, 2001, inadvertent MSIV closure and subsequent reactor trip. The event response was complicated by steamline code safety valves 2SV2-2SV21 not immediately reclosing as expected and main steam supply valve 2SA-49 (steam supply to the TDAFW pump) being slow to open. In addition, inspectors evaluated licensee performance during the subsequent unit restart and power ascension.

The inspectors performed a detailed and independent review of risk significant SSC response to the event by using operator logs, plant computer data, alarm logs and/or strip charts, and operator statements. The inspectors also evaluated the licensee's post trip/readiness review for restart. The inspectors evaluated the proposed corrective actions for the inadvertent MSIV closure and the secondary relief valve's failure to immediately reseat following the reactor trip. Review of operating experience and the root cause for the human performance problem were assessed. Associated problem identification and resolution for operator performance, procedural quality, training, and equipment performance were also evaluated. The root cause investigation of the reactor trip was documented in PIP M-01-3139.

b. Findings

No findings of significance were identified.

4OA5 Other

Radiological Controls for the Independent Spent Fuel Storage Installation (ISFSI)

a. Inspection Scope

The inspectors evaluated implementation of selected elements of the licensee's radiological control program for the ISFSI. Those controls were evaluated for conformance with the ISFSI TSs pertaining to dose rates from the spent fuel storage casks and for monitoring radiation dose levels at the ISFSI boundary fence. The inspectors reviewed the licensee's survey reports for the most recent survey at the boundary fence and for each of the five casks currently in storage to determine whether the dose rates were well within the TS limits. The inspectors performed independent surveys for the general area gamma and neutron dose rates at the ISFSI boundary fence and for contact dose rates at selected locations on two casks to determine whether those dose rates were consistent with the licensee's recorded survey results. The inspectors also verified by direct observation that TLDs were in place on each side of the ISFSI boundary fence as required by TS.

The following licensee documents and procedures were examined during the inspection:

HP/0/B/1003/063	Radiological Status and Routine Surveillance
HP/0/B/1006/025	Radiation Protection Controls for Loading Spent Fuel Assemblies into TN-31A Dry Storage Casks

b. Findings

No findings of significance were identified.

4OA6 Meetings

The inspectors presented the inspection results to Mr. D. Jamil, Station Manager, McGuire Nuclear Station, as well as other members of licensee management and staff, at the conclusion of the inspection on September 24, 2001. The licensee acknowledged the findings presented.

The inspectors asked the licensee whether any of the material examined during the inspection should be considered proprietary. No proprietary information was identified.

4OA7 Licensee Identified Violations

The following finding of very low significance were identified by the licensee and constitute a violation of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600 for being dispositioned as an NCV.

NCV Tracking Number	Requirement Licensee Failed to Meet
50-369/01-03-03	Contrary to TS LCO 3.6.14., on June 21, 2001, the licensee identified that a Unit 1 containment divider barrier system access hatch was not in the closed position as required by TS. In addition, contrary to TS SR 3.6.14.2 , the licensee failed to verify that the sealing surfaces of the hatch had no detrimental misalignments due to the door not being fully closed. The hatch is required to be closed to prevent excess steam bypass away from the ice condenser system during a high-energy line break inside containment. Although the analyzed peak upper containment pressure would have increased for this post-accident condition, the licensee was able to demonstrate through calculations that the containment remained operable with the hatch not fully secured. This issue is captured in the licensee's corrective action program under PIP M-01-2854 and is being treated as a NCV. (Green)

PARTIAL LIST OF PERSONS CONTACTED

Licensee

Barron, B., Vice President, McGuire Nuclear Station
Bradshaw, S., Superintendent, Plant Operations
Loucks, L., Manager, Radiation Protection
Thomas, C. J., Manager, Regulatory Compliance
Dolan, B., Manager, Safety Assurance
Evans W., Security Manager
Geer, T., Manager, Reactor Electrical Systems Engineering
Jamil, D., Station Manager, McGuire Nuclear Station
Patrick, M., Superintendent, Maintenance
Peele, J., Manager, Engineering
Thomas, K., Superintendent, Work Control
Travis, B., Manager, Mechanical Civil Engineering

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-369,370/01-03-01 NCV	Inadequate Compensatory Measures Result in Degradation of Flood Mitigation Function for EDG Areas (Section 1R06)
50-369/01-03-02 NCV	Inadequate ECCS Venting Procedure Results in ECCS Piping Voids (Section 1R15)
50-369/01-03-03 NCV	Failure to Meet Requirements of TS LCO 3.6.14. for containment divider barrier hatch not being in the closed position (Section 4OA7)

Closed

None

Discussed

None

LIST OF ACRONYMS

AP	-	Abnormal Procedure
CRS	-	Control Room Simulator
CY	-	Calendar Year
DEP	-	Drill and Exercise Performance
ECCS	-	Emergency Core Cooling System
EDG	-	Emergency Diesel Generator
EOF	-	Emergency Operations Facility

ERO - Emergency Response Organization
FSAR - Final Safety Analysis Report
ICMF - Impairment and Compensatory Measures Form
LIV - Licensee Identified Violation
LOCA - Loss-of-coolant Accident
LCO - Limited Condition for Operation
MGTM - Temporary Modifications
MSIV - Main Steam Line Isolation Valves
NCV - Non-Cited Violation
NSD - Nuclear System Directive
ODCM - Offsite Dose Calculation Manual
OSC - Operational Support Center
OM - Operations Shift Manager
PI - Performance Indicator
PIP - Problem Investigation Process
PMT - Post Maintenance Test
RCS - Reactor Coolant System
REMP - Radiological Environmental Monitoring Program
RWST - Refueling Water Storage Tank
SCBA - Self-Contained Breathing Apparatus
SDP - Significance Determination Process
SSC - Structures, Systems, and Components
SSF - Safe Shutdown Facility
TLD - Thermoluminescence Dosimeter
TS - Technical Specification
TSC - Technical Support Center
UFSAR- Updated Final Safety Analysis Report

LIST OF DOCUMENTS REVIEWED (for Section 1RO6)

PIP M-01-03250 Apparent Discrepancy in UFSAR, Design Bases Documents, and Various Procedures due to Lack of Credited Flood Curbs Between the Turbine Building and the EDG Areas - (inspection generated)

PIP M-01-03304 Apparent Discrepancy Between Set points for EDG Room Sump Level Instruments and Automatic Actions/Set points Referenced in the Associated Alarm Response Procedures - (inspection generated)

PIP M-01-03291 Air Flow Detected Past Seal on Unit 1 EDG Area Maintenance/ Equipment Door (PD-7) - (inspection generated)

PIP M-01-03279 Potential Unit 1B EDG Sump Concern due to Unsecured Bucket of Oil Dry Pads Under Grating in Trench Around EDG - (inspection generated)

PIP M-01-03210 Inadequate Compensatory Measures for Unit 1 EDG Flood Protection on July 10, 2001 - (inspection generated)

PIP M-01-02691 Backlog Through Unit 2A EDG Sump Pump Discharge Check Valve 2WNCV0007 due to Debris

PIP M-01-00905	Evaluate Removing Time Critical Action of Isolating an EDG Room Leak Within 30 Minutes and Take Credit for Sump Pumps
PIP M-96-00284	Evaluate Non-Seismic Fire Protection Piping in All Four EDG Rooms
PIP M-00-04441	The Small Pit Sump Under Each EDG Have No Preventative Maintenance to Ensure Operability
PIP M-01-00866	The 84-Inch Circulating Water System Expansion Joints Connected to the 1A1 and 2B2 Main Condenser Water Boxes are Experiencing Some Through-Wall Leakage
PIP M-01-01071	Possible Enhancement to Turbine Building/Auxiliary Building Door Preventive Maintenance Based on an Oconee Issue
PIP M-00-03230	Failed Torque Switch on Circulating Water System Pump Discharge Valve 2RC79
PIP M-99-00676	Turbine Building Sump Pump System Level Instruments 2WPPS5020 and 5030 Were Greater Than Two Times Out-Of-Tolerance
PIP M-01-00058	Turbine Building Sump Pump System Level Instrument 2WPPS5031 Was Greater Than Two Times Out-Of-Tolerance