March 24, 2000

EA 00-28

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

SUBJECT: NRC INTEGRATED INSPECTION REPORT NOS. 50-369/00-01 AND 50-370/00-01

Dear Mr. Barron:

This refers to the inspection conducted between January 16, and February 26, 2000, at McGuire Nuclear Station. The enclosed report presents the results of that inspection.

During the six-week period covered by this inspection, your conduct of activities at the McGuire facility was generally characterized by safety-conscious operations, sound engineering and maintenance practices, and careful radiological work controls.

Based on the results of this inspection, the Nuclear Regulatory Commission (NRC) has determined that one violation of NRC requirements occurred. This violation is being treated as a Non-Cited Violation (NCV), consistent with Section VII.B.1 of the Enforcement Policy. The NCV is described in the subject inspection report. If you contest the violation or severity level of this NCV, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001, with copies to the Regional Administrator, Region II, the Resident Inspector at the McGuire Nuclear Station, and the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

DEC

In accordance with 10 CFR 2.790(a) of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and any response you choose to make will be placed in the NRC Public Document Room.

Sincerely,

/RA/

Loren R. Plisco, Director Division of Reactor Projects

Docket Nos.: 50-369 and 50-370 License Nos.: NPF-9 and NPF-17

Enclosure: NRC Integrated Inspection Report 50-369/00-01 and 50-370/00-01 w/Attachment - Dissenting Comments on NCV

cc w/encl: Regulatory Compliance Manager (MNS) Duke Energy Corporation Electronic Mail Distribution

Manager Nuclear Regulatory Licensing Duke Energy Corporation 526 S. Church Street Charlotte, NC 28201-0006

Lisa Vaughn Legal Department (PB05E) Duke Energy Corporation 422 South Church Street Charlotte, NC 28242

Anne Cottingham Winston and Strawn Electronic Mail Distribution Mel Fry, Director Division of Radiation Protection N. C. Department of Environmental Health & Natural Resources Electronic Mail Distribution

County Manager of Mecklenburg County 720 East Fourth Street Charlotte, NC 28202

Peggy Force Assistant Attorney General N. C. Department of Justice Electronic Mail Distribution

Enclosure

U.S. NUCLEAR REGULATORY COMMISSION

OFFICIAL RECORD COPY DOCUMENT NAME: C:\mcg0001.wpd

OFFICE	RII:DRI	P	RII:DR	Р	RII:DR	S	RII:EIC	S	RII:DR	Р				
SIGNATURE	3/23													
NAME	SShaef	fer alt	DBillin	gs3/21	JKreh	3/21	ABola	n d3/22	COgle	3/22				
DATE	3/	/2000	3/	/2000	3/	/2000	3/	/2000	3/	/2000	3/	/2000	3/	/2000
E-MAIL COPY?	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO

3

<u>Distribution w/encl</u>: F. Rinaldi, NRR R. W. Borchardt, OE B. Summers, OE:OA file

PUBLIC

REGION II

Docket Nos:	50-369, 50-370
License Nos:	NPF-9, NPF-17
Report No:	50-369/00-01, 50-370/00-01
Licensee:	Duke Energy Corporation
Facility:	McGuire Nuclear Station, Units 1 and 2
Location:	12700 Hagers Ferry Road Huntersville, NC 28078
Dates:	January 16, 2000 - February 26, 2000
Inspectors:	S. Shaeffer, Senior Resident Inspector D. Billings, Resident Inspector - Oconee J. Kreh, Emergency Preparedness Inspector (Section P8.1)
Approved by:	C. Ogle, Chief Reactor Projects Branch 1 Division of Reactor Projects

EXECUTIVE SUMMARY

McGuire Nuclear Station, Units 1 and 2 NRC Inspection Report 50-369/00-01, 50-370/00-01

This integrated inspection included aspects of licensee operations, maintenance, engineering, and plant support. The report covered a six-week period of resident inspections, as well as an in-office review by a regional inspector.

Operations

• Operator response to an unexpected rod control urgent alarm was appropriate and in accordance with abnormal procedures. Troubleshooting activities were well planned, thorough, and implemented at lower electrical grid risk periods. The root cause of the alarm was not identified; however, the urgent failure was effectively cleared and full rod function capability was restored. (Section O2.1)

Maintenance

• A degraded 48-volt power supply affecting the Unit 1 containment pressure control system was properly identified during routine preventive maintenance. (Section M2.1)

Engineering

- Required modifications to replace a degrading power supply were detailed and the licensee appropriately evaluated the change for impact on plant operations, design, and emergency response considerations. (Section M2.1)
- Long-term corrective actions for an adverse trend in 48-volt power supply performance were adequate for the identified conditions. (Section M2.1)
- Additional examples of cracked base material and cracked phenolic material were identified on Cutler-Hammer relays in safety-related applications. Initial operability determinations were determined to be adequate. (Section E2.1)
- A non-cited violation was identified regarding inadequate 10 CFR 50.59 evaluations for use of compensatory actions to maintain operability of the control room ventilation system. The licensee had dissenting comments on this issue. (Section E8.1)

Report Details

Summary of Plant Status

<u>Unit 1</u>

Unit 1 operated throughout the inspection period at 100 percent power.

Unit 2 began the inspection period at 100 percent power. On January 28, 2000, unit power was reduced to approximately 65 percent as part of a fuel conservation plan to support the next scheduled refueling outage. The unit returned to approximately 100 percent power on February 14, 2000, and operated without any further power reductions for the remainder of the inspection period.

I. Operations

O1 Conduct of Operations

O1.1 General Comments (71707)

The inspectors conducted frequent reviews of ongoing plant operations. In general, the conduct of operations was professional and safety-conscious. Increased operations oversight was observed during troubleshooting activities for identified rod control problems.

O1.2 <u>10 CFR 50.72 and Other Required Notifications (71707)</u>

On February 4, 2000, the licensee reported a condition that may have resulted in operation outside the design basis of the plant. Specifically, a deficiency was identified in the current ACTION statement for McGuire TS for one inoperable level channel of the refueling water storage tank (FWST). This TS allows the option of placing the affected channel in the trip condition for an indefinite period of time. A single failure of an additional FWST level channel during a design basis loss of coolant accident (LOCA) with this channel in trip could result in premature swapover of the low head safety injection pumps to the containment sump. This could impact cooling of the core following a LOCA.

The inspectors verified that all three channels of FWST level instrumentation of both McGuire units were currently operable. The licensee established administrative controls to limit the time (48-hours based on other similar units' TS) that the plant could operate in this condition, until such time as the TS can be revised to limit operation with this single failure vulnerability. Following the inspection period, the licensee submitted Licensee Event Report (LER) 50-369/00-002-00, McGuire Units 1 and 2 in a Condition Outside Design Basis of Plant Due to Refueling Water Storage Tank Level Channels in a Trip Condition for an Indefinite Period of Time. The LER review by the inspectors will include a review of previous plant operation with inoperable FWST level channels placed in the trip condition. The inspectors considered the licensee's immediate corrective actions appropriate.

O2 Operational Status of Facilities and Equipment

O2.1 Unit 1 Urgent Rod Control Failure Response

a. Inspection Scope (71707)

The inspectors reviewed the licensee's response to a Unit 1 rod control urgent failure annunciator. Operator response to the control room indications, compliance with applicable Abnormal Procedures (AP), and control of troubleshooting evolutions were evaluated.

b. Observations and Findings

On January 14, 2000, a rod control urgent failure annunciator was received with the control rods in automatic and no rod movement or demand in progress. Upon receipt, operators entered AP/1/A/5500/14, Rod Control Malfunction, verified stability of pre-existing plant parameters, and took actions prescribed by the procedure. Initial troubleshooting identified that the cause of the annunciator was an urgent alarm in power cabinet 1SCDE that affected various shutdown bank components.

Over the subsequent two-week period, the licensee developed and implemented a variety of troubleshooting activities, including individual card testing. The inspectors noted that for activities which placed the unit at an increased risk for a transient (dropped rods), the licensee conservatively delayed performance of the activities during periods of inclement weather conditions. On January 28, 2000, the inspectors attended the complex evolution repair planning meeting for resetting and testing of the rod control urgent failure alarm. Engineering and operations staff were actively involved in the final troubleshooting activities. Operator guidance had realistic expectations for anticipated conditions and the plan identified required operator actions. Although extensive troubleshooting activities were performed, the licensee did not identify the root cause of the rod control urgent alarm. However, when the urgent alarm was reset, the condition had cleared. Subsequent verification testing included rod movement and rod timing verifications. The testing results were reviewed by the inspectors, and no problems were identified.

c. Conclusions

Operator response to an unexpected rod control urgent alarm was appropriate and in accordance with abnormal procedures. Troubleshooting activities were well planned, thorough, and implemented at lower electrical grid risk periods. The root cause of the alarm was not identified; however, the urgent failure alarm was cleared and full rod function capability was restored.

II. Maintenance

M1 Conduct of Maintenance

M1.1 General Comments

a. Inspection Scope (61726, 62707)

The inspectors reviewed a variety of maintenance and surveillance activities during the inspection period, focusing on testing and maintenance activities that included the following specific items:

- PT/1/A/4252/003A, Revision 24, CA Valve Stroke Timing Quarterly Turbine Driven Pump Flow Path
- PT/1/A/4252/001, Revision 99, No. 1 TD CA Pump Performance
- PT/1/A/4208/001A, Revision 40, 1A NS Pump Performance Test
- PT/0/A/4200/032, Revision 5, Periodic Inspection of Ice Condenser Lower Inlet
 Doors
- OP/0/A/6100/06, Revision 052, Reactivity Balance Calculation
- SM/0/A/8510/006, Revision 2, Ice Condenser Intermediate Deck Doors Inspection and Corrective Maintenance
- PT/0/B/4974/004, Revision 5, Rod Control Timing Verification Test
- IP/0/A/3090/002, Revision 18, Instrument and Electrical Troubleshooting

b. Observations and Findings

The inspectors witnessed selected surveillance tests and observed that approved procedures were available and in use, test equipment was calibrated, test prerequisites were met, system restoration was completed, and acceptance criteria were met. In addition, the inspectors noted, where applicable, that approved procedures were available and in use, prerequisites were met, equipment restoration was completed, and maintenance results were adequate. The maintenance and surveillance activities were properly approved by operations personnel and were included on the plan of the day. Work associated with risk significant structures, systems, or components was properly evaluated to determine its impact on the plant's risk profile. Appropriate TS action statements and selected licensee commitments were implemented. Applicable Technical Specification surveillance requirement (TSSR) and/or Core Operating Limits Report limits were also satisfied.

c. Conclusions

The inspectors concluded that the reviewed routine maintenance and surveillance activities were adequately completed.

M2 Maintenance and Material Condition of Facilities and Equipment

M2.1 Identification and Corrective Action for Power Supply Degradation

a. Inspection Scope (61726, 62707)

The inspectors reviewed resolution of a degraded power supply identified during the performance of preventive maintenance (PM) work order 98230995. Operability of affected equipment, implementation of modifications to correct the problem, and conduct of a Plant Operations Review Committee (PORC) were reviewed.

b. Observations and Findings

On January 14, 2000, during the performance of PM 98230995, the licensee identified that the containment pressure control system (CPCS) Train B, 48-volt power supply permit light was dim for loop 1NSPT5360. This loop provides an open permissive to containment spray discharge valves 1NS-12B and 1NS-15B, if containment pressure is greater than 0.35 pounds per square inch (psi). Operators declared the component inoperable in accordance with TS 3.6.6 Action A.1, which provides a 72-hour action time to restore the equipment to operable status. The licensee replaced the degraded power supply for 1NSPT5360; however, during post-maintenance testing, it was identified that the power supply failure relay was overloading the power supply, resulting in the power supply shutting down. Further evaluation indicated that the replacement power supply, which was a different model supplied with additional overload protective devices, could not operate properly in the loop due to inductive loads in the circuit that caused the power supply to trip. The licensee reviewed the loads on the loop and determined that a relay which operates the Regulatory Guide 1.47 bypass status light 1SI12 4-6 (NS SYS Train B CPCS Inhibit) and annunciator 1AD9 5-5 (NS SYS Train B CPCS Fail) was causing the power supply overloading problem. Because no other replacement power supply was readily available. the licensee decided to remove these loads by mechanically disabling the associated relay; thereby allowing the replacement power supply to support proper operation of the CPCS loop.

The licensee conducted a PORC to review the proposed modification (MGTM-0148) to disable the relay from the subject loop. Issues evaluated included the effects of the change concerning lost annunciation and status lights on plant operations and emergency response, the method in which the relay was disabled, and the Updated Final Safety Analysis Report (UFSAR). In general, the lost annunciation and status light functions were duplicated by other available information, and status of the power supply was supplemented by operator rounds for this equipment. The inspectors evaluated the proposed change to the power supply circuit and concluded that the licensee's evaluations were appropriate. The inspectors observed that the PORC conservatively requested that engineering perform a

complete evaluation per 10 CFR 50.59 for the change in lieu of only a screening based on their understanding of the scope of the change.

The inspectors also noted that there has been an increasing trend in the frequency of the subject 48-volt power supply failures during recent plant operation, including a failed power supply for the Unit 1 annulus ventilation system (see LER 50-369/99-002-01). The inspector discussed the recent failures with plant engineering personnel. The licensee indicated that they were aware of the increased potential for failures of this type and considered the root cause was related to aging of the components. The licensee had begun a replacement program for these types of power supplies; however, due to a lack of information related to the date codes for installed power supplies, the prioritization of the replacement of suspect components along with increased awareness of the available status light indications. Based on the LER referenced above, the licensee was taking additional steps to ensure that plant operators were aware that failure of these power supplies could impact TS safety-related components and the affected components on any failing loop should be evaluated in detail. Accordingly, the inspectors concluded that the licensee's corrective action plan was adequate.

c. Conclusions

A degraded 48-volt power supply affecting the Unit 1 containment pressure control system was properly identified during routine preventive maintenance. Required modifications to replace the power supply were detailed and the licensee appropriately evaluated the change for impact on plant operations, design, and emergency response considerations. Long-term corrective actions for an adverse trend in 48-volt power supply performance were adequate for the identified conditions.

M8 Miscellaneous Maintenance Issues (92902, 90712)

M8.1 (Closed) LER 50-369/99-01-00: Failure to Meet Technical Specification Surveillance Requirements for Ice Condenser Lower Inlet Doors

The events of the subject LER were previously reviewed in detail in Inspection Report 50-369,370/99-02 and Non-Cited Violation (NCV) 50-369/99-02-05 was identified for inadequate opening door torque testing of lower ice condenser inlet doors. During the current inspection period, the inspectors reviewed the LER, associated PIP M-99-1034, and verified implementation of the identified corrective actions. No additional problems were identified. This LER is closed.

III. Engineering

E2 Engineering Support of Facilities and Equipment

E2.1 Followup to the Failure of Cutler-Hammer Relays

a. Inspection Scope (37551, 62707)

The inspectors reviewed the root cause evaluation, metallurgy reports, inspection scope and criteria, work orders, and corrective actions taken. Involved licensee personnel were interviewed.

b. Observations and Findings

Failures of the Cutler-Hammer relays were documented in Inspection Report 50-369. 370/98-10. The licensee initiated an inspection of all cabinets containing Cutler-Hammer relays. The inspections were performed to identify evidence of cracked metal bases. These inspections were completed for Unit 2 during the March 1999 outage. Unit 1 inspections were nearing completion when phenolic cracking was discovered on January 26, 2000. The licensee reinspected all relays to determine if phenolic cracking had been missed in the previous inspections. Approximately 2,600 relays were inspected with approximately 150 showing evidence of base cracking and approximately 180 showing evidence of phenolic cracking. For each identified deficiency, the licensee evaluated the extent of the physical condition and determined through testing that the relays would have performed their intended function. At the end of the inspection period, the licensee was planning to conduct a "shaker table" test for failure of the worst cracked relays to supplement the seismic portion of the operability analysis. Licensee review has indicated that the base cracking and the phenolic cracking appear to be related to relays with a 1975 production date. Each of the relays inspected that were found to have significant base or phenolic cracking resulted in a separate PIP. The licensee initiated work request 98060799, which removed all 1975 date code stamped relays from the warehouse.

c. Conclusions

Additional examples of cracked base material and cracked phenolic material were identified by the licensee. Initial operability determinations were determined to be adequate.

E8 Miscellaneous Engineering Issues (92903)

E8.1 (Closed) Unresolved Item (URI) 50-369,370/96-10-05: Use of Compensatory Measures to Ensure Control Room Area Ventilation System (CRAVS) Operability

This URI concerned the licensee's practice of using compensatory measures, in lieu of entering TS 3.0.3, when breaching the control room pressure boundary to support CRAVS maintenance/testing or other non-CRAVS testing. Examples of these activities included: (1) breaching of the control room normal ingress/egress doors to allow temporary cables to be connected to support rod cluster control assembly (RCCA) drop testing; (2) removal of CRAVS common train duct work access panels to support routine maintenance and inspection activities; and (3) breaching the CRAVS pressure boundary for cable pulling. During these planned work activities, the licensee did not declare the two control room

ventilation systems inoperable per TS 3.7.6, which would have resulted in entry into TS 3.0.3. Instead, the licensee considered the control room ventilation systems operable, but degraded, based on planned compensatory measures to close the breach within a threeminute allowable time frame. This three-minute period was based upon calculation MCC-1227-00-00-0048, Dose Consequence Impact of Mark BW Fuel Reload for Accident Analyzed in Chapter 15 of the McGuire UFSAR, which does not assume credit for CRAVS for the first three minutes following an accident. Compensatory actions for the CRAVS boundary were implemented and reviewed by the licensee in accordance with the provisions of NRC Generic Letter (GL) 91-18, Information to Licensees Regarding NRC Inspection Manual Section on Resolution of Degraded and Nonconforming Conditions. It should also be noted that for planned maintenance activities on one train of CRAVS, the licensee declared the affected train inoperable and complied with TS 3.7.6. However, the work activities in question involved work that affected the operability of both CRAVS trains.

The NRC was concerned that the licensee's practice of using compensatory measures rather than declaring both trains of CRAVS inoperable during the performance of these types of evolutions, circumvented the TS requirements. During the subject work activities, the surveillance requirement of TS 4.7.6 (pressurization of the control room) could not be met. This pressurization test verifies the integrity of the control room enclosure and the assumed inleakage rates of potentially contaminated air. The control room positive pressure, with respect to potentially contaminated adjacent areas, is designed to minimize dose to control room personnel following a postulated accident. If both trains of CRAVS were inoperable, both McGuire units would be required to enter TS limiting condition for operation (LCO) 3.0.3. This TS requires action to be initiated within 1 hour to place the unit(s) in a mode in which the specification does not apply and to place the units in at least Mode 3 in the following 6 hours.

In a March 31, 1999, response to Task Interface Agreement (TIA) 98-08, the NRC's Office of Nuclear Reactor Regulation (NRR) documented their review of the subject issue. This TIA response, which was provided to the licensee as an attachment to NRC Inspection Report 50-369,370/99-03, dated June 2, 1999, stated the following:

"With respect to the particular cited McGuire example, it is not appropriate for a licensee to purposefully degrade or create a non-conforming condition and then use a compensatory measure as a means of bypassing Technical Specification Limiting Condition of Operation (LCO) action statements and associated action times or other license conditions. The staff's position for the use of compensatory measures, as described in GL 91-18, Rev. 1, was established as a means for affording licensees the ability to take direct and prudent compensatory measures upon the discovery of a non-conforming or degraded condition to maintain the plant in a safe condition until the non-conforming or degraded condition could

be evaluated and corrected. It was not envisioned, nor is it appropriate, that such compensatory actions be used to avoid fulfillment of license conditions or Technical Specifications."

"The McGuire TS has a surveillance requirement which verifies that either CRAVS train can maintain a positive pressure within the control room boundary. If the CRAVS duct work or control room boundary is breached such that the CRAVS system cannot achieve and maintain this positive pressure, then this surveillance requirement cannot be met and the appropriate TS actions need to be entered. This would mean entry into TS 3.0.3 when in Modes 1, 2, 3 or 4 and/or immediate suspension of Core Alterations, and movement of irradiated fuel assemblies when in Modes 5 and 6 or during movement of irradiated fuel assemblies. The Technical Specification Branch finds that the three-minute rule does not provide sufficient time or guaranty that the surveillance requirement could be performed or that the newly sealed breaches can maintain the boundary positive pressure."

The NRC staff met with the licensee on June 18, 1999, to discuss the issue. Subsequently, the licensee responded to the TIA response in a letter dated August 30, 1999, in which they disagreed with several issues therein. On November 29, 1999, the NRC Staff issued a reply to Duke Energy Corporation's response further clarifying the NRC's position regarding this matter. The NRC, as documented in Inspection Report 50-413,414/99-03, also identified this issue as being applicable to Catawba Nuclear Station.

Coincident with the ongoing reviews and resolution of this issue, on September 13, 1999, the licensee requested, and the staff granted McGuire an exigent license amendment (dated September 22, 1999) to permit continued operation of both units for 24 hours in the event of a degraded CRAVS pressure boundary (or system) affecting the operability of both trains. This amendment allows the licensee to perform associated CRAVS maintenance and other activities within a prescribed TS action time when the system is inoperable due to not being able to meet its prescribed TSSRs.

The following table contains examples of the licensee's implementation of the "three-minute rule" for maintaining operability of the CRAVS system prior to receipt of the September 22, 1999, exigent license amendment. These examples were obtained following a three-year historical review of CRAVS work history performed by the inspectors and the licensee.

Work Order/ Modification Number	Date	Activity	Estimated Duration of CRAVS Inoperability
NSM MG-12412/00	February 14, 1997 - May 15, 1997 (multiple times during outage)	Unit 1 operator aid computer (OAC) replacement/cable pulling through CRAVS boundary	Maximum duration estimated was 1.5 hours, procedurally allowed up to 12 hours

CRAVS Three-Minute Rule Implementation Examples

NSM MG-22412/00	October 3, 1997 - December 17, 1997 (multiple times during outage)	Unit 2 OAC replacement/cable pulling through CRAVS boundary	Maximum duration estimated was 1.5 hours, procedurally allowed up to 12 hours
WO 97005443	February 14, 1997	PT/O/A/4600/078, RCCA drop timing using rod position grey code (Unit 1)	Approximately 4 hours
WO 97034014	June 1997	PT/O/A/4600/104, RCCA drop timing using rod position grey code, (Unit 2)	Approximately 4 hours
WO 97050800	October 1997	PT/O/A/4600/104, RCCA drop timing using rod position grey code (Unit 2)	Approximately 4 hours
WO 98080349	November 10, 1998	PM/OVCAH0002, control room air handling unit AHU-2, preventive maintenance/periodic inspection (MP/O/A/7450/016, VC Filter Removal and Installation)	Approximately 1 hour (included filter change out)

Based on the above, the inspectors concluded that the planned work activities which involved breaching of the CRAVS pressure boundary or degradation of the CRAVS common plenum ductwork on the above occasions resulted in the inoperability of both trains of the CRAVS. The inspectors did not identify any instances in which the licensee was in TS 3.0.3 for greater than 7 hours; therefore, a TS required shutdown was not required for these occurrences. However, 10 CFR 50.59 does not permit a licensee to make changes to the facility or procedures as described in the safety analysis report without prior commission approval when it involves a change in the TSs. The inspectors reviewed the procedures which incorporated, and were subsequently used to implement, the compensatory measures for the activities described in the table above and concluded that the associated 10 CFR 50.59 evaluations were inadequate. Specifically, in performing the required 10 CFR 50.59 evaluation for the procedures, as described in Nuclear Safety Directive (NSD) 209, 10 CFR 50.59 Evaluations, the licensee indicated that for each of the activities (all of which involved the incorporation of compensatory measures for the preplanned degradation of CRAVS instead of entering the TS LCO) did not require a change to the TSs. However, the staff has determined that, entry into the TS LCO was required; thereby indicating a TS change would be necessary to preclude this requirement. This Severity Level IV violation of 10 CFR 50.59 is being treated as an NCV, consistent with Section VII.B.1 of the NRC Enforcement Policy. It is identified as NCV 50-369,370/00-01-01: Inadequate 10 CFR 50.59 Evaluation for Activities Rendering Both Trains of CRAVS Inoperable.

This violation is in the licensee's corrective action program as PIP M99-2537. Since identification of this issue, the licensee has placed added emphasis on identifying and resolving related issues to maintain compliance with prescribed TSSRs, including the delay of proposed CRAVS modifications and requests for one-time TS exemptions to their operating license for specific evolutions. At the end of the inspection period, the licensee was continuing to develop additional actions to address the NRC's regulatory conclusions regarding this issue.

The licensee had dissenting comments on this issue as noted in Section X1. This URI is closed.

IV. Plant Support

R1 Radiological Protection and Chemistry Controls

R1.1 General Comments (71750)

The inspectors made frequent tours of the controlled access area and reviewed radiological postings. The inspectors observed that workers were adhering to the requirements of wearing protective clothing. The inspectors also determined that locked high radiation doors were properly controlled, high radiation and contamination areas were properly posted, and radiological survey maps were updated to accurately reflect radiological conditions in the respective areas.

P8 Miscellaneous EP Issues (82301)

P8.1 (Closed) Inspector Followup Inspection (IFI) 50-369,370/99-06-02: Exercise Weakness for Failure to Correctly Classify the Initial Set of Scenario Emergency Conditions as an Alert

This finding was entered into the licensee's corrective action system as PIP 0-M99-3735. This IFI is administratively closed.

V. Management Meetings

X1 Exit Meeting Summary

The resident inspectors presented the inspection results to members of licensee management at the conclusion of the inspection on March 2, 2000. The licensee had dissenting comments on the NCV described in Section E8.1 regarding the control room ventilation system. These comments were provided by the licensee's Regulatory Compliance Manager on March 7, 2000, in the attached E-mail. No proprietary information was identified.

PARTIAL LIST OF PERSONS CONTACTED

<u>Licensee</u>

Barron, B., Vice President, McGuire Nuclear Station

Bradshaw, S., Superintendent, Plant Operations

Byrum, W., Manager, Radiation Protection

Cash, M., Manager, Regulatory Compliance

Dolan, B., Manager, Safety Assurance

Evans W., Security Manager

Geer, T., Manager, Civil/Electrical/Nuclear Systems Engineering

Jamil, D., Station Manager, McGuire Nuclear Station

Patrick, M., Superintendent, Maintenance

Peele, J., Manager, Engineering

Loucks, L., Chemistry Manager

Thomas, K., Superintendent, Work Control

Travis, B., Manager, Mechanical Systems Engineering

INSPECTION PROCEDURES USED

- IP 37551: Onsite Engineering
- IP 62707: Maintenance Observations
- IP 61726: Surveillance Observations
- IP 71707: Conduct of Operations
- IP 71750: Plant Support
- IP 82301: Evaluation of Exercises for Power Reactors
- IP 90712: In-Office Review of Written Reports on Non-Routine Events
- IP 92901: Followup Operations
- IP 92902: Followup Maintenance
- IP 92903: Followup Engineering

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-369,370/00-01-01	NCV	Inadequate 10 CFR 50.59 Evaluation for Activities Rendering Both Trains of CRAVS Inoperable (Section E8.1)
<u>Closed</u>		,
50-369,370/99-001-00	LER	Failure to Meet TSSR for Ice Condenser Lower Inlet Doors (Section M8.1)
50-369,370/96-10-05	URI	Use of Compensatory Measures to Ensure CRAVS Operability (Section E8.1)

50-369,370/99-06-02	IFI	Exercise Weakness for Failure to Correctly Classify the Initial Set of Scenario Emergency Conditions as an Alert
Discussed		

50-369/00-002-00 LER McGuire Units 1 and 2 in a Condition Outside Design Basis of Plant Due to Refueling Water Storage Tank Level Channels in a Trip Condition for an Indefinite Period of Time (Section O1.2)

LIST OF ACRONYMS USED

AP CPCS CRAVS FWST GL IR LER LCO LOCA NCV NRC NRR NSD OAC PIP PM PORC PSI PT RCCA TIA		Abnormal Procedure Containment Pressure Control System Control Room Area Ventilation System Refueling Water Storage Tank Generic Letter Inspection Report Licensee Event Report Limiting Condition for Operation Loss of Coolant Accident Non-Cited Violation Nuclear Regulatory Commission NRC Office of Nuclear Reactor Regulation Nuclear Safety Directive Operator Aid Computer Problem Investigation Process Preventive Maintenance Plant Operations Review Committee Pounds per Square Inch Periodic Testing Rod Cluster Control Assembly Task Interface Agreement
TS	-	Technical Specifications
TSSR	-	Technical Specification Surveillance Requirement
TSTF	-	Technical Specification Traveler Form
UFSAR	-	Updated Final Safety Analysis Report
URI WR	-	Unresolved Item Work Request

Dissenting Comments on NCV

Duke Energy respectfully disagrees that the use of manual compensatory actions to maintain control room ventilation operable was a violation of 10 CFR 50.59 or any regulatory requirement. Details of Duke Energy's position in this regard are established in presentation material from a June 18, 1999 and a letter from H.B. Barron to H.N. Berkow dated August 30, 1999. During the presentation with the staff on June 18, 1999 Duke specifically addressed the compliance basis for meeting the requirements of 10 CFR 50.59. NRC Staff present at that meeting and the staff position expressed in the Agency letter of November 29, 1999 did not dispute the regulatory position regarding compliance with 10 CFR 50.59. The agency took the position in the November 29, 1999 letter that Duke had violated the requirements of SR 3.0.1 as applied to SR 3.7.9. Duke continues to regard that position as a new Agency position. As such a proposed NCV against 10 CFR 50.59 does not appear consistent with the previous record between Duke and the Agency on this matter.

On the merits, the violation as asserted, does not appear to constitute a violation of 10 CFR 50.59. Paraphrasing, the regulation permits licensees to make certain changes to the facility without prior NRC approval with an exception for two cases. The two cases requiring prior NRC approval are (1) "changes to technical specifications incorporated in the license" or (2) Unreviewed Safety Questions. The first prohibition prevents a licensee from revising Appendix A of the Facility Operating License (Technical Specifications). This document is an appendix directly incorporated into a federally granted license and can only be changed by the Nuclear Regulatory Commission. Licensees may request changes to this document pursuant to 10 CFR 50.90, such changes must be issued by the Agency. Duke did not make changes to the documents at McGuire which are maintained as controlled documents and labeled as Technical Specification unchanged from those issued by the NRC. Duke also does not believe an Unreviewed Safety Question was introduced through use of manual compensatory measures.

Duke continues to believe that there is no safety significance associated with this matter and has a reasonable and justifiable bases for prior compliance. The applicability of Generic Letter 91-18 to degraded conditions and appropriate use of manual compensatory measures was the original and central issue. Duke believes this is a generic industry issue warranting further review.