U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-440/89011(DRS)

Docket No. 50-440 License No. NPF-58

Licensee: The Cleveland Electric Illuminating Company
10 Center Road
Perry, OH 44081

Facility Name: Perry Nuclear Power Plant, Unit 1

Inspection At: Perry Site, Perry, Ohio

Inspection Conducted: March 20 through April 19, 1989

R. N. Gardner for

Inspector: M. J. Kopp
Reactor Inspector

5/5/89
Date

Also participating in the inspection and contributing to the report were:

B. Drouin, Region III
A. Nolan, EG&G

Ronald N. Gardner

Approved By: Ronald N. Gardner, Chief
Plant System Section

5/5/89
Date

Inspection Summary

Inspection on March 20 through April 19, 1989 (Report No. 50-440/89011(DRS)
Areas Inspected: Routine announced safety inspection of previously identified findings regarding environmental qualification of electrical equipment within the scope of 10 CFR 50.49, weep holes in terminal boxes, ASCO MSIV solenoids, and Regulatory Guide 1.97 commitments (Modules 30703 and 92701).
Results: Within the area inspected, one apparent violation was identified regarding the licensee's apparent failure to take adequate corrective actions in regards to a previously identified EQ violation and one unresolved item was identified regarding environmental qualification. A deviation to a RG 1.97 commitment was also identified. The unresolved item and the deviation are summarized below:

Deviation

Item No.	Description	Report Section
50-440/89011-01(DRS)	Reactor water level instrumentation does not meet RG 1.97, Rev. 2, Category I requirements.	6.b

Unresolved Item

Item No.	Description	Report Section
50-440/89011-04(DRS)	Terminal box moisture intrusion in containment	4

DETAILS

1. Persons Contacted

a. Cleveland Electric Illuminating (CEI)

+*R. Stratman, Director, NED
*S. Kensicki, Director, PPTD
*E. Riley, Director, NQAD
*M. Lyster, General Manager, PPOD
+*B. Walrath, Manager, NED/EPSS
*K. Newkirk, Manager, Licensing and Compliance
*B. Kanda, Manager, PPOD
K. Peck, Manager, Technical Section
*D. Takecs, Manager, MMQS/NQAD
D. Igyarto, Manager, Training
*G. Dunn, Supervisor, Licensing and Compliance
*L. Teichman, Supervisor, Maintenance
*G. Gardner, Supervisor, Systems Support
+*J. Lausberg, Supervisor, NQAD
G. Garcia, Supervisor, Maintenance
K. Matheny, Senior Project Engineer
+*S. Litchfield, Senior Engineer, EQ Lead
*T. Stear, Senior Design Engineer, NED
G. Solkiewicz, Lead Maintenance Planner
+H. Hegrat, Engineer, Licensing and Compliance

b. U. S. Regulatory Commission (USNRC)

*R. Lanksbury, Acting Senior Resident Inspector
*B. Drouin, Project Inspector

*Denotes those attending interim site exits on March 23 and March 31, 1989.

+Denotes those participating in final telephone exit on April 19, 1989.

2. Licensee Action on Previously Identified Findings

a. (Closed) Unresolved Item(50-440/87013/03a(DRS))

This item addressed the licensee's failure to include in the EQ maintenance procedures the requirement to replace 'O'rings when cover housings are removed and replaced on PYCO temperature elements. The licensee could not provide evidence that 'O' rings were replaced when required.

Subsequent to the NRC inspection, the licensee performed a work history review and implemented EQ maintenance requirements to ensure that all EQ PYCO's were properly sealed. In addition, the licensee implemented Installation Standard Specification (ISS) No. 2700 which

provides specific instructions to maintenance personnel for maintaining equipment qualification requirements for equipment installed in the plant. No further concerns were identified.

b. (Closed) Unresolved Item (50-440/87013-03b(DRS))

This item addressed the licensee's failure to include in the EQ maintenance procedures that pertain to Weed thermocouples the requirements for 'O'ring replacement, application of radiation sealant, and torquing of the cover housing. The licensee could not provide evidence that these requirements were implemented when required.

Subsequent to the NRC inspection, the licensee performed a work history review and implemented EQ maintenance requirements to ensure that all EQ Weed thermocouples were in compliance with EQ standards. In addition, the licensee implemented ISS No. 2700 which provides specific instructions to maintenance personnel for maintaining equipment qualification requirements of equipment installed in the plant. No further concerns were identified.

c. (Closed) Unresolved Item (50-440/87013-03c(DRS))

This item addressed the licensee's failure to include in the EQ maintenance procedures that pertain to Rosemount transmitters the requirements for 'O'ring replacement each time the cover housing was removed and replaced, the application of DOW 55M silicone grease to housing threads, and the application of Nebula 100 grease to pipe plugs used to seal unused conduit openings. The licensee could not provide evidence that these maintenance requirements were implemented prior to May 23, 1987 and June 12, 1987.

Subsequent to the NRC inspection, the licensee performed a review of Rosemount installations, revised the Rosemount EQ file to reference the necessary maintenance requirements, and implemented ISS No. 2700 which provides specific instructions to maintenance personnel for maintaining equipment qualification of Rosemount transmitters. No further concerns were identified.

d. (Closed) Unresolved Item (50-440/87013-03d (DRS))

This item identified that the maintenance section in the EQ file for MSIV blower motors required replacement of the gasket on the motor junction box each time the cover was removed and replaced and that this requirement was not part of the licensee's EQ maintenance program. Review of licensee Work Order 86-05531 indicated that the cover of MSIV blower motor 1E32-C0001 had been removed, but there was no evidence that the gasket had been replaced.

Subsequent to the NRC inspection, the licensee replaced the gasket on the subject motor, and revised the EQ file to incorporate the requirement to replace the gasket. In addition, ISS 2700 has been

implemented which provides specific instructions to maintenance personnel regarding sealing the motor junction box. No further concerns were identified.

e. (Closed) Unresolved Item (50-440/87013-03e(DRS))

Target Rock Solenoid Valve (SOV) qualification documentation (File E-597-000-01) required replacement of seals and gaskets each time the housing cover was removed. This requirement had not been included in the licensee's maintenance program. The licensee performed a review and could not verify the implementation of this requirement.

Subsequent to the NRC inspection, the licensee performed a review of Target Rock SOVs to ensure that EQ maintenance requirements were met, revised the EQ file package to incorporate maintenance requirements, and implemented ISS 2700 which provides specific instructions to maintenance personnel for performing EQ maintenance. No further concerns were identified.

f. (Closed) Unresolved Item (50-440/87013-05a(DRS))

This item addressed the thermal aging exposure of Valcor SOVs using nitrogen as the process medium. The SOVs at the Perry plant are used in the instrument air system. The licensee did not address in the EQ file the differences between the degradation of the organic materials used in the SOV when aged in air as opposed to aging in a nitrogen environment.

Subsequent to the NRC inspection, the licensee performed additional aging calculations to account for the differences between aging in air and nitrogen. No further concerns were identified.

g. (Closed) Unresolved Item (50-440/87013-05b(DRS))

ASCO Test Report AQR-67368 was used to demonstrate a 40 year qualified life for ASCO model No. NP8316 SOVs at Perry. The licensee provided calculations which stated that the aging of the SOV was evaluated using the thermal aging reported in the test program combined with portions of the DBE test exposure. The licensee was informed that the use of the DBE exposure to simulate thermal aging was not accepted where equipment items are required to be qualified for an accident environment since the thermal aging must be performed prior to the accident exposure. In addition, the inspectors noted that nitrogen was used during the EQ tests as the process fluid for the thermal aging simulation. The difference between thermal aging in air and thermal aging in nitrogen had not been addressed in the file.

Subsequent to the NRC inspection, the licensee performed additional calculations to correct the deficiencies noted in the thermal aging analysis, implemented immediate corrective action by establishing a

new shorter qualified life, and updated their maintenance schedules for the replacement of this equipment. No further concerns were identified.

h. (Closed) Unresolved Item (50-440/87013-05c(DRS))

Review of GE qualification test report NEDC-30169 revealed that the housing cover of PYCO temperature elements had been torqued to 50 ft-lbs after completion of the aging, and just prior to the LOCA test. The qualification test procedure stated: "Significant repairs shall not be made to the test specimen(s) after the start of the test sequence." The inspectors determined that the torquing of the housing cover was a significant repair made after the start of the test, and that the subsequent test results were, therefore, invalid.

Subsequent to this finding, the licensee submitted a new evaluation to demonstrate that the PYCO temperature elements were qualifiable without being sealed. This evaluation was based on Wyle Lab Test Report No. 145C3224, dated November 11, 1984. In this test, Wyle tested four PYCO thermocouples whose conduit connections were unsealed and terminated inside the LOCA chamber. No failure was recorded. No further concerns were identified.

i. (Closed) Unresolved Item (50-440/87013-05d(DRS))

This item addressed the qualification of two ITT General Controls electrohydraulic actuators located inside containment. The tested actuators experienced a peak pressure of only 0.3 psig which was much lower than the 10.3 psig postulated to occur under accident conditions at Perry.

Subsequent to the NRC inspection, the licensee provided additional test data and a new evaluation to support qualification of the actuators. In addition, the licensee stated that the actuator would fail to an accident safe position and would not be required to operate again during or after an accident. No further concerns were identified.

j. (Closed) Unresolved Item (50-440/87013-05e(DRS))

This item concerned the ability of Limitorque test report B0119 to demonstrate qualification of terminal blocks installed in Limitorque actuators. The insulation resistance readings taken as part of the EQ test did not reflect the stresses the terminal blocks would be subjected to under plant accident conditions. Therefore, the inspectors concluded that qualification had not been demonstrated for Marathon 1600, Buchanan 0222, Buchanan 0524, and Curtis type "L" terminal blocks. Subsequent to the NRC inspection, the licensee performed a review and determined that Marathon 300, and General Electric (GE) EB-5 terminal blocks were qualified for Limitorque actuators. The licensee further stated that as part of their corrective action, suspect terminal blocks had been replaced with

qualified Marathon 300 terminal blocks, and that EQ Limitorque actuators were configured with either Marathon 300 terminal blocks, GE-EB-5 terminal blocks, or butt splices.

During this current inspection, the inspector reviewed the licensee's corrective action and determined that EQ Limitorque actuator 1E12-F042B contained a GE-EB-25 terminal block. Qualification of the GE-EB-25 terminal block had not been demonstrated in the licensee's EQ file. Based on details described in Section 3 of this report, full compliance has apparently not yet been achieved. Deficiencies regarding inadequate corrective action shall be tracked as a separate item.

k. (Closed) Unresolved Item (50-440/87013-07a(DRS))

This item identified that three screws were missing from the solenoid enclosure of Target Rock SOV 1E12-F075B. Qualification is based upon all eight enclosure screws being properly installed. As a result of the NRC finding, the licensee took corrective action and performed a walkdown of Target Rock SOVs located in harsh environments. The licensee identified four other Target Rock SOVs with missing enclosure screws. In their corrective action response the licensee stated that all deficiencies had been reworked.

During this current inspection, the NRC inspectors reviewed the licensee's corrective action. The inspectors identified that Target Rock SOV 1E12-F075A had loose enclosure screws. As a result of the NRC finding, the licensee performed a walkdown of EQ Target Rock SOVs and found seven (7) with loose enclosure screws. Based on details described in section 3 of this report, full compliance was not achieved. Deficiencies regarding inadequate corrective action shall be tracked as a separate item.

l. (Closed) Unresolved Item (50-440/87013-07b(DRS))

This item addressed the installation of Limitorque T drains at higher elevations rather than the lowest point of the actuator housing. The inspectors were concerned that in the event of a HELB fluid would not be drained and would accumulate in the actuator housing possibly shorting out the electrical internals. The licensee took immediate corrective action and installed a proper T drain.

Subsequent to the NRC inspection, the licensee examined all other Limitorque actuators located in a harsh environment and reported that all T drain connections were found to be properly located (CEI response PY-CIE-OIE-0282L, dated July 27, 1987). In addition, the licensee has implemented ISS 2701 which provides specific instructions to maintenance personnel to verify correct T drain orientation in Limitorque actuators. Based on a specific review of this item no further concerns were identified; however,

further review of the licensee's EQ corrective action program is being conducted based upon the findings discussed in Section 3 of this report.

m. (Closed) Unresolved Item (50-440/87013-07c(DRS))

This item concerned the licensee's failure to remove plastic shipping caps from Limitorque actuator grease relief valves. The inspectors were concerned that the shipping cap would prevent a pressure buildup inside the actuator from being relieved under accident conditions. The licensee performed an immediate walkdown of other actuators and found 31 other shipping caps in similar configurations. All caps were removed. The inspectors considered these actuators to be unqualified as found for accident conditions based on inadequate documentation to qualify the installed configuration.

The licensee has subsequently implemented ISS-2701 which provides specific instructions to maintenance personnel to verify that shipping caps have been removed. Based on a specific review of this item no further concerns were identified; however, further review of the licensee's EQ corrective action program is being conducted based upon the finding discussed in Section 3 of this report.

n. (Closed) Unresolved Item (50-440/87013-07d(DRS))

This item concerned the postulated submergence of 12 Limitorque actuators. The licensee identified and reported that they had failed to install deflector plates on the actuators. These deflectors were designed to direct suppression pool hydrodynamic impact load from the operators during the postulated suppression pool swell under accident conditions. The licensee took immediate corrective action and installed the deflectors plates. The licensee also provided calculations to demonstrate that the actuators would have performed their safety function under the postulated hydraulic impact during an accident. Based on a specific review of this item no further concerns were identified; however, further review of the licensee's EQ corrective action program is being conducted based upon the findings discussed in Section 3 of this report.

o. (Closed) Unresolved Item (50-440/87013-07e(DRS))

This item identified six Weed RTDs that were identified by the NRC inspector as having loose housing covers. Loose covers could compromise the sealing of the terminal board and allow moisture intrusion. The licensee performed a walkdown of all EQ Weed RTDs and performed appropriate rework on all identified discrepancies. In addition, the licensee provided additional test data regarding qualification of the installed RTDs and implemented ISS 2700 which provides specific instructions to maintenance personnel for sealing Weed RTDs. Based on a specific review of this item no further concerns were identified; however, further

review of the licensee's EQ corrective action program is being conducted based upon the findings discussed in Section 3 of this report.

p. (Closed) Unresolved Item (50-440/87013-07f(DRS))

This item identified a loose housing cover on PYCO thermocouple 1E31-N001. The EQ documentation required a 50 ft-lb torque on the housing covers. As a result of the NRC findings, the licensee performed a walkdown and found several other loose PYCO housing covers. The licensee reported that all discrepancies were reworked. In addition, the licensee provided an engineering evaluation to support the qualification of the installed PYCO thermocouples, and implemented ISS 2700 which provides specific instructions to maintenance personnel for torquing the thermocouple housing cover. Based on a specific review of this item no further concerns were identified; however, further review of the licensee's EQ corrective action program is being conducted based upon the findings discussed in Section 3 of this report.

q. (Closed) Open Item (50-440/87013-02(DRS))

This item identified that reactor water level instrumentation did not meet RG 1.97 requirements in that the level was not measured up to the centerline of the main steam line.

During this review the inspector determined that this is contrary to licensee commitments regarding RG 1.97, Revision 2. This is considered a Deviation from a previously identified licensee commitment. Further discussion of this item is provided in Section 6.b of this report.

r. (Closed) Open Item (50-440/87013-04(DRS))

The inspectors noted that formal training had not been implemented by the licensee to address key aspects of 10 CFR 50.49 requirements and that contractor personnel hired during outages did not receive training. Since various EQ maintenance deficiencies were identified during the inspection, the inspectors were concerned that these deficiencies may have been a result of inadequate EQ training of key personnel.

The licensee agreed to enhance their EQ training activities and developed EQ Training Course QA1010, which became effective on July 21, 1987. This course is controlled and presented by the licensee's training section. The presentation includes the use of training aids, such as video tapes and overhead slides, in addition to the verbal presentation.

The EQ Training Course is presented on a continuing basis to all levels of employees associated with the environmental qualification of safety-related equipment, including technical staff, management, QA staff, mechanics, I&C technicians, and contractor personnel.

No further concerns were identified.

s. (Closed) Open Item (50-440/87013-06(DRS))

This item concerned the substitution of qualified Amoco Rykon Premium Grease No. 2 used in General Electric (GE) motors with Mobile Grease 28. The EQ file contained a letter from GE quoting tests that qualified Mobile Grease 28; however, no test reports were included in the file. The licensee agreed to supplement their files with the appropriate reports.

During this inspection, the inspector verified that the licensee had updated the EQ file on Mobil Grease 28 to include Limitorque Report B0212.

No further concerns were identified.

3. Licensee Corrective Action on Limitorque Terminal Blocks and Target Rock Solenoid Valves

During the periods of July 13 through November 10, 1987, Region III conducted an inspection to verify the environmental qualification (EQ) of electrical equipment at the Perry Nuclear Plant (NRC Inspection Report 50-440/87013(DRS)). As a result of this inspection, a Severity Level III violation (50-440/89011-02(DRS)) with a $25,000 civil penalty was imposed on Cleveland Electric Illuminating Company (CEI) on February 11, 1988. Each of the unresolved items addressed in Section 2 of this report were included in the Severity Level III violation. Included in the Notice of Violation (NOV) that accompanied the civil penalty were examples of violations of 10 CFR 50.49(f) regarding unqualified terminal blocks in Limitorque actuators and missing solenoid housing bolts on Target Rock solenoid valves.

As a result of these violations, the licensee was required to take corrective steps and report the results achieved. On March 11, 1988, CEI submitted a response to the Severity Level III violation stating that the following steps had been taken to correct the deficiencies:

Limitorque Terminal Blocks

CEI initiated a review of the terminal blocks in Limitorque operators and concluded that those configured with Marathon 300 series terminal blocks (terminal block wired to the motor during the Limitorque test), GE-EB-5 series terminal blocks and operators utilizing Raychem butt splices were acceptable and required no action. Two operators that contained other types of terminal blocks were reworked with Marathon 300s.

Target Rock Solenoid Valves

All Target Rock solenoid valves located in potentially harsh environments were inspected, and those identified with missing bolts were reworked. This effort was completed by August 6, 1987. An engineering evaluation was conducted to determine if there was a potential for loss of the required environmental seal. The evaluation results (completed July 22, 1987) indicated that compression would not be lost. Therefore, CEI concluded that the environmental seal was not affected.

Summary of Recent NRC Findings

During the recent NRC EQ followup inspection, conducted March 20 through April 19, 1989, the NRC inspectors reviewed the licensee's corrective actions regarding the Level III violation issued in February, 1988. The inspectors reviewed EQ files, EQ test reports, EQ procedures, performed physical inspections of installed EQ equipment and interviewed plant personnel. The following deficiencies were identified.

- Limitorque Terminal Blocks

  During this inspection, the NRC inspectors identified a GE-EB-25 terminal block in Limitorque Actuator 1E12-F042B. This is contrary to the licensee's March, 1988 corrective action response which stated that Limitorque actuators contained either Marathon 300 terminal blocks, GE-EB-5 terminal blocks, or butt splices.

  It was identified during the inspection that the licensee initiated two work orders to open, inspect, and close Limitorque valve 1E12-F042B. Work Order No. 89001747 was initiated on March 21, 1989, in order to allow the licensee to perform an inspection of the subject valve prior to the NRC inspection that was scheduled to occur on the following day.

  Work Order No. 89001748 was also initiated on March 21, 1989 and allowed valve 1E12-F042B to be opened a second time for the NRC inspection on March 22, 1989. The NRC inspectors interviewed plant personnel to ascertain whether or not the licensee had prior knowledge of the presence of the incorrect GE-EB-25 terminal block in Limitorque actuator 1E12-F042B. The NRC inspectors determined that the licensee did not implement Work Order No. 89001747 but considered the pre-inspection step a prudent measure since valve 1E12-F042B had not been opened for inspection during the current outage. The inspectors also concluded that the licensee did not have prior knowledge of the wrong terminal block in valve 1E12-F042B.

  The licensee has committed to corrective action which involves a 100% walkdown of 166 Limitorque valves located in harsh environments. To date, the licensee has identified Kulka, Buchanan, Curtis type "L," and GE-EB-25 terminal blocks in various EQ Limitorque valves. These terminal blocks are being replaced with qualified Marathon 300 terminal blocks prior to startup from the current refueling outage.

  The licensee's March, 1988 corrective action response regarding this issue was based upon an inspection of safety-related Limitorque actuators performed in 1983. The licensee has attributed the recent deficiencies to the inaccuracies in the 1983 inspection program.

- Target Rock Solenoid Valves (SOV)

  During this recent inspection, the NRC inspectors identified loose screws on the enclosure cover for Target Rock SOV 1E12-F075A.

Qualification of the SOV is based on all eight (8) enclosure screws being tightened.

As a result of the NRC finding, the licensee inspected all 20 EQ Target Rock SOV's and identified seven that had loose screws. The licensee reported that all deficiencies have been corrected.

The licensee stated that the March, 1988 corrective action was to inspect for missing screws and that loose screws were not part of the corrective action. The licensee attributed the current deficiencies to lack of detailed torque instructions.

10 CFR 50, Appendix B, Criterion XVI, "Corrective Action", requires, in part, that measures be established to assure that conditions adverse to quality, including nonconformances are promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition. The corrective action taken shall be documented and reported to appropriate levels of management.

Contrary to the above, CEI failed to perform adequate corrective actions in that the licensee failed to identify and correct all instances in which unqualified terminal blocks were installed in 10 CFR 50.49 Limitorque valves, and all instances in which 10 CFR 50.49 Target Rock solenoid valves were not installed in the EQ tested configuration.

The licensee's failure to perform adequate corrective action is considered an apparent violation of 10 CFR 50, Appendix B, Criterion XVI. (50-440/89011-03(DRS))

4. Weep Holes in Terminal Boxes

During this recent inspection, the inspector determined that weep holes were not installed in terminal boxes located in containment. The licensee informed the inspector that terminal boxes located in containment (outside of the drywell) are sealed with gaskets, and that moisture intrusion into the boxes would not occur. The licensee further informed the inspector that the conduits that enter terminal boxes are installed vertically such that moisture could not enter the conduit and subsequently the terminal boxes. The inspector informed the licensee that the ability of the gasket materials to prevent moisture intrusion was not verified by an EQ test. The licensee committed to inspecting terminal boxes in containment to verify conduit configuration and the contents of the boxes.

Pending further review by the licensee and the NRC, this is considered an Unresolved Item. (50-440/89011-04(DRS))

5. ASCO MSIV Solenoids

On November 3, 1987, the inboard and outboard MSIV D valves failed a functional test and were declared inoperable. On November 4, 1987, the NRC issued a Confirmatory Action Letter (CAL) to the licensee, and an Augmented Inspection Team (AIT) arrived at the Perry plant to establish the root cause of the MSIV failures and review the licensee's corrective actions.

During this recent EQ followup inspection, the inspectors reviewed the licensee's EQ test of the solenoids and corrective actions scheduled during the current outage.

The failure of the ASCO valves was attributed to degradation of the EPDM elastomer material caused by exposure to elevated temperatures. The localized elevated temperature was caused by steam in excess of 300°F that was leaking in the direct location of the MSIVs which had failed the functional test. The failure of the EPDM elastomer because of elevated temperatures was, therefore, established as a possible root cause of the delayed closures. The licensee rebuilt the ASCO solenoid valves using EPDM material and returned the MSIVs to service.

Thermal endurance tests were conducted and the results of the test program verified that the EPDM elastomer material had failed due to localized high temperature. The EPDM failure modes experienced at the plant were reproduced during testing. ASCO valves using Viton material were tested for the same environmental conditions and the tests showed that the Viton material was much more tolerant of high temperature conditions than the EPDM material.

As a result, the following corrective actions are scheduled to be taken during the current refueling outage.

- Replacement of the MSIV pilot solenoid valves with valves containing Viton material.

- Replacement of the MSIV ASCO solenoid valve coil and Viton Seal on an 18-month maintenance schedule.

Based on this review, the NRC inspectors determined that the licensee's actions appeared acceptable.

No further concerns were identified.

6. Regulatory Guide 1.97 Commitments

a. The Perry Plant has one SER 6 commitment that remains to be implemented. This commitment is in regards to Regulatory Guide 1.97, Revision 2, and requires the licensee to submit a plan to upgrade the neutron monitoring instrumentation to Category I requirements prior to startup from their first refueling outage. The licensee has submitted a letter, dated March 3, 1989, (PY-CEI/NRR-0960-L) to NRR requesting a change to this commitment.

The licensee has proposed delaying the implementation of the commitment to allow for review of an industry proposed alternative. Upon completion of the review and acceptance by the NRC, the licensee intends to implement applicable modifications based on a schedule provided six months after receipt of the NRC Safety Evaluation Report (SER). Pending further licensee and NRC review this commitment remains open. (50-440/87013-01(DRS))

b. Regulatory Guide 1.97, Revision 2, Table 2, BWR variables requires reactor water level instrumentation between the bottom of the core support plate and the lesser of the top of vessel or centerline of the main steam line to meet Category 1 requirements (Regulatory Position 1.4). Contrary to the above, the reactor water level instrumentation at the Perry Plant meets Category I requirements only up to 40 inches below the main steam line centerline, and Category III requirements for the remaining distance up to the main steam line centerline. The licensee stated that this issue had been accepted by NRR, however, the Perry Regulatory Guide 1.97 SER did not acknowledge this deviation. This is considered a Deviation from a previously identified licensee commitment. (50-440/89011-01(DRS)). A written response is required.

7. Unresolved Item

An unresolved item is a matter about which more information is required in order to ascertain whether it is an acceptable item, an open item, a deviation, or a violation. An Unresolved Item is discussed in Paragraph 4.

8. Exit Interview

The Region III inspectors met with the licensee's representatives (denoted under Paragraph 1) during interim exits on March 23 and March 31, 1989, and discussed their findings at the conclusion of the inspection on April 19, 1989. The inspectors summarized the purpose and findings of the inspection and the licensee acknowledged this information. The licensee did not identify any documents/processes reviewed during the inspection as proprietary.