



# THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

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MURRAY R. EDELMAN  
VICE PRESIDENT  
NUCLEAR

September 12, 1985  
PY-CEI/OIE-0109 L

Mr. C. J. Paperiello, Director  
Division of Reactor Safety, Region III  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
799 Roosevelt Road  
Glen Ellyn, Illinois 60137

Perry Nuclear Power Plant  
Docket Nos. 50-440; 50-441  
50-440/85042 Noncompliance Response

Dear Mr. Paperiello:

This letter is to acknowledge receipt of Inspection Report 50-440/85042 transmitted by letter dated August 13, 1985. This report identified areas examined by Messrs. D. E. Hills, G. F. O'Dwyer, and R. D. Lanksbury during their inspection conducted June 22 through August 2, 1985 at the Perry Nuclear Power Plant.

Attached to this letter is our response to the Notice of Violation dated August 13, 1985. This response is in accordance with the provisions of Section 2.201 of the NRC's "Rules of Practice", Part 2, Title 10, Code of Federal Regulations.

Our response has been submitted to you within thirty days of the date of the Notice of Violation as requested. If there are additional questions, please do not hesitate to call.

Very truly yours,

Murray R. Edelman  
Vice President  
Nuclear Group

MRE:njc

Attachments

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PDR ADOCK 05000440  
Q PDR

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Mr. C. J. Paperiello

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September 12, 1985  
PY-CEI/OIE-0109 L

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USNRC Site, SBB50

Mr. D. E. Keating  
USNRC Site, SBB50

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RESPONSE TO NONCOMPLIANCE  
440/85042-01 (DRS)

A. Severity Level V Violation

10 CFR 50, Appendix B, Criterion V, as implemented by CEI's Corporate Nuclear Quality Assurance Program (CNQAP), Section 0500, Revision 6, states that "activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances.

Contrary to the above, preoperational test procedures TP 1C71-P001, "Reactor Protection System (RPS)," TP 1C71-P002, "Reactor Protection System Motor-Generator Sets", and TP 1M51-P001, "Combustible Gas Control System", were not appropriate in that these procedures were inconsistent with administrative requirements and applicable design values and did not adequately test system design features. Values or tolerances prescribed for Turbine Control Valve Fast Closure Trip Setpoint and Turbine First Stage Pressure Low Power Setpoint were incorrect in TP 1C71-P001. In addition, this procedure did not provide for restoration/replacement of certain fuses removed to initiate annunciators as required by Test Program Instruction (TPI)-7 and TPI-18. TP 1C71-P002 did not test interlocks which prevent both RPS buses from being supplied simultaneously from their alternate power source. TP 1M51-P001 did not have permanent plant instrumentation, used to provide acceptance criteria data, designated with the symbol "(AC)" on the Instrument Summary Sheet. This symbol indicates those instruments which require verification that they have been calibrated within six months of their use and post-test calibration verification as required by TPI-7 and the Instrument Summary Sheet (440/85042-01 (DRS)).

B. Response

1. Corrective Action Taken and Results Achieved

Each of the Test Procedures (TP) discrepancies identified was evaluated and corrected prior to the performance of the test. The results of the evaluations and the corrective actions are listed below:

A. Test Procedure 1C71-P001, "Reactor Protection System":

- a. The more restrictive tolerance of  $530 \pm 15$  psig versus  $530 \pm 30$  psig was incorrectly used as the acceptance criteria for the Turbine Control Valve (TCV) Fast Closure Trip Setpoint. Although the use of this tolerance would have no impact on safety, the value was inconsistent with the correct value used elsewhere in the procedure. TP-C71-P001 has been revised to correct this discrepancy.

- b. The Test Procedure correctly verifies the Turbine First Stage Pressure Low Power Setpoint at 178.2 psig on both increasing and decreasing first stage pressure. Above the Low Power Setpoint the TCV Fast Closure Trip will operate; below this pressure the TCV Fast Closure will not operate. When the procedure tested the TCV Fast Closure feature, it was necessary to simulate a turbine first stage pressure above the 178.2 psig setpoint value. In this step the procedure retained the 232 psig value which was used as the setpoint in a previous revision of the test procedure. Simulation of this higher turbine first stage pressure was satisfactory for the performance of the test but the higher pressure was mistakenly labeled as the setpoint. TP C71-P001 has been revised to correct to correct this discrepancy.
- c. The Test Procedure verified that various control room annunciator alarms would occur on loss of power; the loss of power tests were performed by removing the appropriate fuses. Although the alarms will not clear until the fuses are reinstalled, the test program (designed for situations when missing fuses would not be obvious) requires that a second person verify fuse reinstallation. TP-C71-P001 did not meet this requirement and was subsequently corrected.

B. Test Procedure 1C71-P002, "Reactor Protection System (RPS) Motor Generator Sets":

Each RPS bus (A and B) is normally powered from a dedicated Motor Generator (MG) Set. The RPS MG sets are classified as non-safety related because loss of power to an RPS channel results in a channel trip signal which is conservative. To increase plant reliability, either one of the two RPS buses may be lined up to receive power from the same alternate power supply. A three position mechanical switch (Normal - Alt. A - Alt. B) is provided to ensure that only one of the RPS buses is supplied from the alternate power supply. Although the wiring of this switch was verified to match the design drawing during IC&R testing and the system was frequently operated with the switch in each of the three positions, TP C71-P002 did not specifically verify that the switch prevented both RPS buses being supplied from the alternate power supply at the same time. A test addendum to TP C71-P002 has been added to test this interlock function.

C. Test Procedure 1M51-P001, "Combustible Gas Control System":

Test procedures include an "Instrument Summary Sheet" which lists the instruments permanently installed in the system being tested. When the procedure is released for test, this list is used to verify that all of the instruments installed in the system are calibrated. If one of these instruments is used to measure data used as acceptance criteria, it is marked with "(AC)" and additional pre and post test verifications of instrument calibration are required. None of the installed plant instruments used for acceptance criteria in TP M51-P001 were designated "(AC)" on the

summary sheet. Although the Test Procedure had been approved, the step where all of the installed instruments are verified to be in calibration which occurs during the release for test had not yet been performed. At that time, the format of the instrument summary sheet would draw attention to the fact that none of the instruments were designated to be used for acceptance criteria, since no entries would be made in the two right hand columns of the summary sheet. The Instrument Summary Sheets in TP M51-P001 have been revised to show which instruments are used to obtain acceptance criteria.

2. Corrective Action Taken to Avoid Further Noncompliance

A Special Project Plan titled "Test Procedure Assurance Program Plan", was issued in June 1985 to provide additional assurance that test procedures meet program requirements and adequately test system design features. Each Preoperational and selected Acceptance Test procedures, including the tests already completed, are receiving an additional in-depth review by the Management Procedure Review Team (MPRT). The Special Project Plan also provides for additional training to personnel developing and reviewing test procedures.

At the time the NRC identified the discrepancies discussed above, the MPRT review for TP C71-P001 was in progress and the reviews of TP C71-P002 and TP M51-P001 had not been conducted.

3. Date When Full Compliance Will be Achieved

Full compliance has been achieved.

RESPONSE TO NONCOMPLIANCE

440/85042-07 (DRS)

A. Severity Level IV Violation

10CFR 50, Appendix B Criterion XI, as implemented through the licensee's CNQAP Section 1100, requires that a test program be established to assure that structures, systems, and components will perform satisfactorily in service. 10 CFR 50, Appendix B Criterion XIV, as implemented through the licensee's CNQAP, Section 1400, requires that measures be established to indicate the status of individual items of a nuclear power plant.

Contrary to the above, the licensee failed to establish adequate measures to insure that the Shift Test Engineer was aware of the status of his system, with respect to temporary alterations, while it is undergoing testing and to thereby insure that the required testing demonstrated that the structures, systems and components will perform satisfactorily in service.

B. Response

1. Corrective Action Taken and Results Achieved

The intent of Sections 4.1.1 and 4.1.2 of TPI-18 "Temporary Alterations" was to require STE review and approval for temporary alterations at the point of Release For Test (RFT) or prior to RFT if specifically requested by the STE through a memorandum. Thus control of the system by the STE was maintained throughout the preoperational testing on each system. The intent of Section 4.1.4 was only to provide guidance with respect to approval of changes to temporary alterations after control had been given to the STE either by memorandum or RFT. Nevertheless, the following steps have been taken to address the expressed concern.

- a. A review of System Test Engineer (STE) memoranda to establish positive control of temporary alterations, in accordance with TPI-18, "Temporary Alterations", has indicated that all but one STE had submitted a memo prior to Release for Test (RFT). This one exception was determined to have no impact since the subject STE subsequently revised the preoperational test which required an additional RFT. This was considered to be an isolated occurrence.

- b. Section 4.1 of TPI-18 has been revised to clearly require that the STE review and approve all requests for removal of temporary alterations for those systems under NTS jurisdiction.

With respect to the second concern expressed in the report; the practice of keeping the Test Coordinator informed is stressed in the Test Program Manual as reflected by Section 4.7 of TPI-28 "Conduct of Preoperational, Special and Acceptance Tests." As implemented, this includes informing the Test Coordinator of the status of temporary alterations conducted in accordance with approved test procedures which are excepted by PAP-1402, "Control of Lifted Leads, Jumpers, Temporary Electrical Devices and Mechanical Foreign Items." PAP-1402 defines the administrative requirements for all situations in which temporary alterations are installed or removed outside the controls of previously approved procedures. To ensure appropriate notifications continue to occur, the Test Program Manual is being modified to require notification of the control room of changes to temporary alterations made during preoperational testing.

2. Correction Action Taken to Avoid Further Noncompliance

As noted above, TPI-18 has been revised to require the STE to authorize removal of all temporary alterations installed in his system. This revision is consistent with PAP-1402.

Applicable portions of the Test Program Manual (TPI-25 and 28) addressing conduct of testing are being revised to assure that the Test Coordinator is cognizant of all temporary alterations implemented or removed per approved NTS test procedures. This allows the Test Coordinator to take appropriate action if there is any impact on concurrent testing activities. Requirements for temporary alterations not covered under previously approved procedures or instructions are defined in PAP-1402. CEI considers that this action will provide greater assurance that temporary alterations on adjacent systems do not impact or invalidate preoperational test results.

3. Date When Full Compliance Will Be Achieved

Full compliance will be achieved on or before September 27, 1985, with the approval of the revision of the Test Program Manual.

RESPONSE TO NONCOMPLIANCE  
440/85042-06 (DRS)

A. Severity Level V Violation

10CFR50 Appendix B, Criterion XIV, implemented through the licensee's CNQAP, Section 1400, requires that measures be established to indicate the status of individual items of a nuclear power plant.

Contrary to the above, the licensee failed to establish and implement adequate measures to indicate the jurisdictional status of equipment within the Control Room. Adequate controls had at one time existed, but due to a change in an Operations administrative procedure, these controls were negated. (440/85042-06 (DRS)).

B. Response

1. Corrective Action Taken and Results Achieved

The Cleveland Electric Illuminating Company (CEI) has taken the following actions to resolve the jurisdictional status program discrepancies identified by the inspector.

The Test Program Manual (TPI-9) "Turnover to the Nuclear Test Section" has been revised to require that all control devices under NTS jurisdiction in the Control Room be tagged or identified with a dot (except for indication instruments). Control devices under NTS jurisdiction in the Control Room have been tagged or identified as required by TPI-9.

2. Corrective Action Taken to Avoid Further Noncompliance

Nuclear Test Section (NTS) test personnel have been trained to the revised requirements of TPI-9. This revision to the Test Program Manual in conjunction with the personnel training will preclude further occurrences of this nature.

3. Date When Full Compliance Will be Achieved

Full compliance has been achieved.