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NUCLEAR PRODUCTION

ELECTRIC PRODUCTION DEPARTMENT

May 8, 1985

Docket No. 50-352

Inspection Report No. 50-352/85-06

Mr. Stewart D. Ebnetter, Director
Division of Reactor Safety
U.S. Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, PA 19406

Dear Mr. Ebnetter:

Your letter dated April 10, 1985 forwarded Inspection Report 50-352/85-06 for Limerick Generating Station. Appendix A of your letter addresses three items which do not appear to be in full compliance with Nuclear Regulatory Commission requirements. These items are restated below along with our response.

Finding

- A. Code of Federal Regulations 10 CFR 50.54(3)(J) requires, in part, "Apparatus and mechanisms other than controls, the operation of which may affect the reactivity or power level of a reactor shall be manipulated only with the knowledge and consent of a licensed operator present at the controls". Licensee Administrative Procedure A-7 in Section 5.2.2 states similar requirements.

Contrary to the above, on January 25, 1985, instrumentation and controls personnel in the process of troubleshooting previous indication of erratic recirculation pump flow behavior caused an increase in recirculation pump flow, which increased reactor power, when connecting a recorder to the recirculation flow control circuit. This work was performed without the knowledge and consent of the licensed operators present at the controls.

This is a Severity Level IV Violation (Supplement 1).

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Response

Failure to notify and obtain permission from Shift Operations personnel prior to troubleshooting the recirculation pump control circuit on January 25, 1985 deviated from normal practices of Instrumentation and Controls (I&C) personnel. On this occasion the technicians were working under the direction of the system engineer to clarify a problem with the Reactor Recirculation Flow indication. Although their activities resulted in the recirculation pump transient, the technicians had no reason to believe that installing the recorder to test jacks would have that effect. The root cause of the event was the use of a temporary test device (Gould Strip Chart Recorder, Model 2800W) which does not have an internal isolation circuit.

The initial corrective action taken to rectify the failure of I&C technicians to properly communicate with Shift Operators before initiating work was to conduct a training session with I&C technicians. The training session discussed the subject event in detail and stressed the importance of informing the Control Room Operators of activities planned when troubleshooting a problem. In addition, a new procedure has been issued to control troubleshooting activities for safety related equipment which requires obtaining work group supervisor permission prior to work. One objective of this procedure is to enhance communication with Shift Operators. To ensure proper implementation of this new troubleshooting control procedure specific training sessions have been conducted with applicable work groups on site.

Based on the corrective actions described, full compliance with 10 CFR 50.54(3)(J) has been achieved.

Finding

- B. Technical Specification 6.8.1.a requires, in part, "written procedures be established as recommended in Appendix A of Regulatory Guide 1.33, Revision 2". Regulatory Guide 1.33, Revision 2, in Appendix A, paragraph 9.e, recommends, in part, "general procedures for the control of maintenance which includes items such as a method for obtaining permission and clearance from operation personnel to work".

Contrary to the above, as of January 25, 1985 controls to assure that permission is obtained from operations personnel prior to performing troubleshooting activities are not contained in general procedures.

This is a Severity Level IV Violation (Supplement I).

Response

While troubleshooting a problem with the "B" Recirculation Pump control circuit on January 25, 1985, I&C technicians deviated from the normal practice of coordinating these activities with the shift operators. During this troubleshooting activity a recirculation pump speed and flow transient occurred which was caused by use of a recording test instrument. It was not known that this particular temporary test instrument (Gould Strip Chart Recorder, Model 2800W) did not have an internal isolation circuit.

The consequences of this inadvertent event were limited and the 5% reactor power limit was not exceeded. The limited consequences were attributed mainly to backup administrative controls in place which had the pump electronic and mechanical speed control stops set at 48% and 50% speed respectively.

The initial corrective action taken as a result of this event was to remove this particular test strip chart recorder from use and to verify that no other authorized test equipment lacked an internal isolation circuit. Although the Shift Operator was not informed of the activity at the time, the transient would not have been prevented if communications had been established. As described in our response to Finding A., an additional corrective action taken was to conduct a training session with I&C technicians. The training session discussed the transient event in detail and stressed the importance of informing the Shift Operators of activities planned when troubleshooting a problem.

To improve troubleshooting activities a specific control procedure has been issued. The objectives of this procedure include; 1) establish a bound for troubleshooting activities, 2) enhance communication with Shift Operations, 3) document restoration, 4) control troubleshooting activities by obtaining work group supervisor permission, and 5) ensure record retention. To ensure proper implementation of this new troubleshooting control procedure, specific training sessions were conducted with applicable work groups on site.

Based upon the actions described to improve controls for troubleshooting activities, full compliance has been achieved.

Finding

- C. License NPF-27 requires, in part, "conducting the post-fuel loading initial test program without deviating from the initial test program administrative procedures". Initial test program Administrative Procedure A-202 requires, in part, in Section 5.4, that the plant be placed in a suitable hold condition when a test exception involves a Level 1 acceptance criteria failure, the startup test group supervisor obtains a resolution and convenes a Test Review Committee (TRC) or Plant Operational Review Committee (PORC) meeting to review and recommend approval of the resolution and hold condition, document such action, and the Station Superintendent approves the hold condition and provides explicit approval to exceed the approved hold condition".

Contrary to the above, as of February 7, 1985, two examples were identified that failed to follow the Administrative Procedure.

1. A Level 1 acceptance criterion failure identified as TER-22 on January 5, 1985 did not have documented evidence that the review of the resolution and hold condition satisfied the requirement for TRC or PORC review.
2. Level 1 acceptance criterion failure, identified as TER-29 on January 11, 1985, did not result in placing the plant in a suitable hold condition, TRC or PORC review and recommendation for approval of the resolution of the test exception and hold condition, Station Superintendent approval of the hold condition, or explicit approval from the Station Superintendent to exceed the hold condition.

The safety impact of this violation was minimal because the licensee did have authorization by the Station Superintendent for TER-22 and did have analysis available (although unauthorized) at the time of TER-29, which was subsequently authorized for use, that accepted the data. However, the actions were not fully in accordance with the administrative procedure implementing the startup program.

Therefore, the violation is being issued and is classified as a Severity Level V Violation (Supplement I).

Response

Although it was not properly documented, the Level 1 acceptance criterion failure identified in TER-22 and its resolution were discussed extensively with PORC members and Electric Production Quality Assurance (EPQA) representatives. As stated in the

body of the inspection report, the inspector agreed that the extent of review conducted met the intent of the administrative procedure. Subsequent to this occurrence, TRC meeting 85-01 and PORC meeting 85-19 officially reviewed and approved the resolution of TER-22 which revised the pipe expansion Level 1 acceptance criteria from 200 mils to 385 mils for all test temperatures. TER-22 was officially and properly closed on February 15, 1985.

TER-29 incorrectly documented a failure to meet a Level 1 acceptance criteria during implementation of STP-17.3 at 920 psig. Since this failure had previously been documented by TER-22 at 450 Degrees F and a revised acceptance criterion had been provided, Shift test personnel considered its resolution to also apply to performance of STP-17.3 at 920 psig. Section 5.4.4.1.a.1 of procedure A-202 permits a TER to apply to more than one subtest if the same acceptance criteria is affected in each of the subtests. During final review and approval of TER-22 the TRC and PORC agreed that it also applied to the performance of STP-17.3 at rated reactor temperature and documented that conclusion. Accordingly, reference to a Level 1 acceptance criterion failure in TER-29 was deleted. The remaining Level 2 acceptance criterion failures in TER-29 were reviewed and their resolution to accept "as is" was approved by the TRC on April 24, 1985.

In addition to the actions already described, a training session was conducted to familiarize Startup Group test personnel with these events to prevent similar administrative problems in the future. Specifically, the objectives were: 1) ensure all test personnel understood the actual events; 2) discuss the various interpretations of administrative requirements relevant to the events; 3) provide specific directions on how to administratively comply with similar events in the future; and 4) provide additional guidance to test program personnel on test implementation and processing of test results.

Further improvements have been achieved by setting goals for more timely review of TER(s) by the TRC and PORC. On March 13, 1985, during the exit meeting for NRC inspection 352/85-14, the inspector reported that much improvement has been achieved regarding administrative controls for the startup test program implementation and test results review.

Administrative Procedure requirements for TER(s) 22 and 29 have been completed satisfactorily and full compliance with Administrative Procedure A-202 has been achieved.

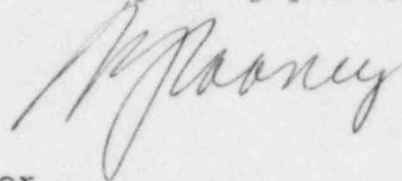
Mr. Stewart D. Ebnetter

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Should you have any questions or require further information, please contact us.

Very truly yours,

A handwritten signature in cursive script, appearing to read "J. T. Wiggins", is written over the typed name.

cc: Dr. T. E. Murley, Administrator
Mr. J. T. Wiggins, Resident Site Inspector
See Attached Service List

cc: Judge Helen F. Hoyt
Judge Jerry Harbour
Judge Richard F. Cole
Troy B. Conner, Jr., Esq.
Ann P. Hodgdon, Esq.
Mr. Frank R. Romano
Mr. Robert L. Anthony
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Jay M. Gutierrez, Esq.
Atomic Safety & Licensing Appeal Board
Atomic Safety & Licensing Board Panel
Docket & Service Section (3 Copies)
James Wiggins
Timothy R. S. Campbell

January 16, 1985