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ARTHUR E. LUNDVALL, JR.
VICE PRESIDENT
SUPPLY

October 8, 1985

U. S. Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, PA 19406

Docket Nos. 50-317
50-318
License Nos. DPR-53
DPR-69

ATTENTION: Mr. Thomas E. Murley
Regional Administrator

SUBJECT: Inspection Report 50-317/85-16; 50-318/85-14

Gentlemen:

This letter is being forwarded as requested by a letter from Mr. T. T. Martin of your staff dated August 8, 1985. In that letter you requested a response to each of the technical deficiencies in the report attached to that letter. The enclosure to this letter details our response to each of the findings in the above inspection report.

Should you have further questions regarding this reply, we will be pleased to discuss them with you.

Very truly yours,

Arthur E. Lundvall, Jr.

AEL/LES/gla

Enclosure

cc: D. A. Brune, Esquire
G. F. Trowbridge, Esquire
D. H. Jaffe, NRC
T. Foley, NRC

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ENCLOSURE (1)

REPLY TO APPENDIX A OF NRC INSPECTION REPORT 50-317/85-16; 50-318/85-14

FINDING 317/85-16-01; 318/85-14-01

VARIOUS MAINTENANCE PROBLEMS WITH PASS

Modifications to the Post Accident Sampling System (PASS) are being evaluated to reduce the current maintenance problems with the system, including the installation of manual valves. These modifications are scheduled to be completed by the end of the 1985 Unit 2 refueling outage. In addition, the maintenance priority of the PASS, as well as all other Technical Specification items, has been addressed in the Calvert Cliffs Instruction which controls maintenance priorities to ensure that proper attention is given to the appropriate systems and problems.

GERMANIUM DETECTOR EFFICIENCY VERIFICATION

Verification of the germanium detector efficiencies was conducted by comparison of the reactor coolant germanium detector with that of the PASS. Several discussions with representatives from Combustion Engineering (CE) were held including a detailed review of their calibration method and data. The isotopic analysis error was identified to be CE's normalization of the efficiency data to the volume of reactor coolant sample being counted. The indicated error was in the range of 8 to 10, not 80 as indicated in the inspection report. The error was attributed to the sample chamber volume (10 cc). Analysis procedures have been modified to account for the normalization factor.

NO INTEGRATED TEST OF THE PASS

An integrated test of the PASS has been successfully completed. This test included a test matrix, verification of the LPSI sample path at low RCS pressures, and verification of the sample dilution factor. A chemistry procedure has been established to ensure continued operability.

FINDING 317/85-16-02; 318/85-14-02

VALVE LEAKAGE AND SV-6529 PROBLEMS

The leakage problems and the inability to operate has been attributed to the type of valves installed in the system. To alleviate this problem, manual isolation valves have been installed to prevent leakage and over pressurization of the system. A modification to the PASS during the next Unit 2 refueling outage will replace the problem control valves with a more reliable design.

PASS ERPIP PROCEDURE PROBLEMS

The Emergency Response Plan Implementing Procedure 4.4.7.6 has been revised to reflect site-specific PASS operation.

ENCLOSURE (1)

REPLY TO APPENDIX A OF NRC INSPECTION
REPORT 50-317/85-16; 50-318/85-14

FINDING 317/85-16-03; 318/85-14-03

FAILURE TO IMPLEMENT AND MAINTAIN THE PASS, AND TO COMPLY WITH TECHNICAL SPECIFICATION 3/4.7.13, OPERABILITY REQUIREMENTS

The CE PASS was originally scoped, designed, and installed such that the system would only be expected to operate under post-accident conditions. For this reason, preoperational testing of the system did not include operation of the system at full RCS pressure. When it was decided to routinely operate the system at full pressure to gain familiarity with the equipment, a large number of mechanical and instrument reliability problems became apparent. These problems and the lack of emphasis on corrective actions resulted in the system condition observed by the inspectors.

The following actions have been or will be taken to resolve the subject problems and deficiencies, noted with the Combustion Engineering PASS:

1. An engineering evaluation of the PASS is being performed to identify areas in which a mechanical upgrade of the system is needed. This includes the replacement of leaking valves, and the elimination of all in-line instrumentation.

2. Procedures have been revised and the technicians have been fully trained on operation of the PASS. Differences between the ERPIP's and routine chemistry procedures have been eliminated.

3. Time and motion studies have been completed and this information was used to minimize radiation exposure potential through procedure modification.

4. Responsibility for the PASS has been assigned to the General Supervisor-Chemistry and the maintenance priority for the system has been upgraded.

5. A routine testing program for the PASS has been initiated to identify analytical and mechanical problems.

6. We are negotiating with the Office of Nuclear Reactor Regulation regarding a diluted manual grab sample method of meeting PASS requirements including appropriate Technical Specification changes.

ENCLOSURE (1)

REPLY TO APPENDIX A OF NRC INSPECTION REPORT 50-317/85-16; 50-318/85-14

FINDING 317/85-16-04; 318/85-14-04

CONTAINMENT AIR SAMPLE PROBLEMS

1. The key capture feature has been identified in the Operating Procedure. Specific personnel training has been conducted. To prevent recurrence of this problem, an individual has been assigned responsibility in the Chemistry Section to manage and control procedure changes such as these.

2. The purge times for the sample point have been established and comparison samples have shown them to be accurate. This data has been incorporated into the procedures.

3. We feel that the installation of a flow rate indicator would be an unnecessary modification as discussed previously with an I&E Inspector. The incident cited in the inspection report is incorrect in that power was not provided to the instrumentation. Therefore, no indication was received that flow had been established. No further action is deemed necessary.

4. Reference to remote handling tools, lead gloves, and a lead-lined apron have been deleted since the time and motion study has shown them to be unnecessary.

5. The syringes now specified in the procedure are gas tight syringes which are rated for the expected pressures.

6. Comparison of various samples have shown the extraction point in the sample rig to be representative of the containment atmosphere.

7. A time and motion study has been performed to show that the sample collection and analysis can be performed within GDC-19 dose limits. The incremental dose due to the post accident coolant flow does not impact on the GDC-19 dose limitations.

8. The subject control panel is used weekly for gas analysis. Operations personnel are familiar with the control panel because of its routine use.

9. Core Damage Assessment ERPIP's will be revised, where applicable, to satisfy the concerns, in November 1985.

FINDING 317/85-16-05; 318/85-14-05

MAIN VENT STACK FLOWMETER PROBLEMS

Due to inaccuracies and reliability problems with the subject flow instruments, an alternate means of providing flow information for calculation of release activity was investigated. Since the main vent has a gravity damper which controls flow at a relatively constant rate, a default flow rate is considered appropriate for use in the WRNG microprocessor.

ENCLOSURE (1)

REPLY TO APPENDIX A OF NRC INSPECTION REPORT 50-317/85-16; 50-318/85-14

FINDING 317/85-16-06; 318/85-14-06

INFORMATION AVAILABILITY ON MAIN STEAM EFFLUENT MONITOR

The data showing the Main Steam Effluent Monitor (MSEM) response characteristics have been placed in the files in our Emergency Planning Unit. In addition, the attenuation of the low-energy gammas has been evaluated and a new response curve has been generated. This curve has been placed into the ERPIP's.

FINDING 317/85-16-07; 318/85-14-07

PROCEDURE PROBLEMS WITH MAIN VENT WIDE RANGE NOBLE GAS MONITOR

1. The necessary Surveillance Test Procedures and associated Preventive Maintenance procedures for the Wide Range Noble Gas Monitor (WRNGM) are in place. Some minor improvements in calibration procedures are being addressed in a revision being processed now.

2. The evaluation of the WRNGM response has been completed by the Chemistry Section. This data has been placed in our Emergency Planning Unit files.

3. The WRNGM Operating Instruction (OI) contains detailed procedures for operation. This OI is reviewed in the Continuing Training Program. A new Emergency Response Plan Implementing Procedure has been established and will be implemented by the end of October to provide greater information. This procedure will also be included in the Continuing Training Program.

TRAINING PROBLEMS WITH MAIN VENT WRNGM

Training on the WRNGM was administered to Licensed Operators in requalification training for the 1984 calendar year. There was no formal documented training administered to the control technicians who were designated to work on the instruments in 1984. However, eight control technicians attended vendor training on these instruments during July 29-August 2, 1985. Training has not been administered on the Main Steam Effluent Radiation Monitor since the final configuration it has not yet been declared operational.

FINDING 317/85-16-08; 318/85-14-08

SIGNIFICANT IODINE AND PARTICULATE PLATEOUT PROBLEMS ON GRAB SAMPLE FOR MAIN VENT WIDE RANGE NOBLE GAS GRAB SAMPLES

A line loss evaluation on the plateout of iodine and particulates in the sample lines will be conducted. If the evaluation requires developing a one-tenth scale model of the plant vent, due to complexity, it will not be completed until July 30, 1986. Otherwise, the study should be completed by January 1986. The results of this evaluation will be incorporated into the plant procedures.

ENCLOSURE (1)

REPLY TO APPENDIX A OF NRC INSPECTION REPORT 50-317/85-16; 50-318/85-14

FINDING 317/85-16-09; 318/85-14-09

FAILURE TO PERFORM TECHNICAL SPECIFICATION 4.3.3.8 SURVEILLANCE REQUIREMENTS ON MAIN VENT WIDE RANGE IODINE AND PARTICULATE SAMPLER

The failure to comply with this Technical Specification was the result of a misinterpretation and administrative oversight. This has been corrected in the interim by instituting a two person review system for Chemistry Section Technical Specification items. An individual has been assigned responsibility for these procedure changes as mentioned earlier, to eliminate any possible recurrence of similar events.

FINDING 317/85-16-10; 318/85-14-10

PROCEDURE PROBLEMS WITH MAIN VENT WIDE RANGE NOBLE GAS GRAB SAMPLES AND EXPOSURE CONCERNS IN COLLECTION OF THESE SAMPLES

A time and motion study, and a correlation of the expected iodine concentrations based upon the noble gas monitor response has been conducted. The procedures have been revised to incorporate their findings. Shielding modifications to limit the dose while obtaining and transporting the sample will be completed by February 1986. An alternate route has been established to limit exposure during transport.

FINDING 317/85-16-11; 318/85-14-11

FAILURE TO PROVIDE ENVIRONMENTAL QUALIFICATION OF CONTAINMENT HIGH RANGE RADIATION MONITORS

See the response in the letter from Mr. A. E. Lundvall, Jr., to T. T. Martin dated September 26, 1985, on this subject.

FINDING 317/85-16-12; 318/85-14-12

TRAINING FOR ONSITE MONITORING TEAM MEMBERS ON IODINE MONITORING

It is our position that the training was provided in both calendar year 1984 and 1985. Therefore, we feel we have met the intent of our Training Instruction and the EPRIP, and that no violation occurred. Formal documentation exists to demonstrate that the onsite team members received this training in February 1984. Company documentation includes problem sheets for five of the eleven assigned, indicating that they did attend training on this subject in August and September 1984. One team member did not attend training at that time because he left the Company before the training was conducted. The remaining four on-site team members assigned were trained in calendar year 1985, before the end of September.

ENCLOSURE (1)

REPLY TO APPENDIX A OF NRC INSPECTION REPORT 50-317/85-16; 50-318/85-14

FINDING 317/85-16-13; 318/85-16-13

PROBLEMS WITH ERPIP 4.1.7 PROCEDURE

Emergency Response Plan Implementation Procedures do adequately address in-plant monitoring activities including radioiodine monitoring.

As noted in Section 9.2, findings of IE Inspection Report 50-317/85-16; 50-318/85-14 (first paragraph) the On-Site Monitoring Team (ONMT) is responsible to the Radiation Protection Director (RPD) for performing in-plant radiological surveys. As the team name implies, survey responsibilities include grounds and buildings (inside and outside) within the site boundary (1,200+ acres). Specific locations for monitoring are selected by the RPD based on particular emergency needs (reference ERPIP 4.1.5, Radiation Protection Director, " . . . Action 2: Dispatch monitoring teams as situation warrants and Action 3: Receive plant and on-site dose rates and air sample (gaseous and particulate) survey results from monitoring teams . . ."). The ONMT is aware of survey points selected by their interface with the RPD (ERPIP 4.1.7, Action 2: " . . . Identify monitoring point(s) with RPD . . ."). ERPIP 4.1.7, Action 6, directs the team to do the specified monitoring (" . . . Monitor at points identified above as situation and RPD dictates . . ."). Routine air sampling techniques (detailed in Radiation Safety Procedures) will be used by the team unless AC power is not available. In this case, a battery-powered air sampler is used and Action 6.c will apply. Implementation of this has been successfully demonstrated in four graded exercises and numerous drills.