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OSCAR R. LEE

July 6, 1984 Fort St. Vrain Unit No. 1 P-84194

Mr. John T. Collins Regional Administrator, Region IV U. S. Nuclear Regulatory Commission 611 Ryan Plaza Drive, Suite 100 Arlington, TX 76011

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SUBJECT: June 25, 1984 Meeting

Dear Mr. Collins:

As discussed during the June 25, 1984 meeting between the NRC and PSC, PSC agreed to submit a response to the NRC concerning the various subjects covered in the meeting. The subjects covered and PSC's responses are as follows:

A. NRC COMMITMENTS AS A RESULT OF BTP 9.5-1 APPENDIX A REVIEW

During our meeting on June 25, 1984 you drew our attention to several items that PSC had committed to in 1978 as a result of the BTP 9.5-1 fire protection review. The 1978 commitment involved 17 specific items, of which a review since our June 25th meeting confirms that 14 of the 17 items were completed as required. The three items remaining are: #7, Add a hydraulic oil mist detector above each Hydraulic Power Unit; #8, Add fire detectors in the locations specified on Table 2.0-1. These detectors will alarm and annunciate in the control room and alarm locally; #10, Provide the capability to fully open building ventilation exhaust dampers (Turbine Building and Access Control Bay) during a fire condition to remove smoke and corrosive gases.

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A brief history of the three unfinished items, #7, 8 and 10 is as follows: The project to install items 7 and 8 was well underway in late 1981 and early 1982, i.e. design work was completed and the material was ordered in late 1981, the paperwork authorizing construction being completed in early 1982. Construction actually began in late 1982 with approximately 45% of the work being completed when Engineering had to place a hold on construction. It was determined, at that time, that the Vendor, Pyrotronics, had discontinued manufacturing the line of equipment we had ordered, but, unfortunately, no one had bothered to notify PSC. Since our design was based on one manufacturer's equipment, Engineering was forced to start over on the project. The redesign is now complete, new material has been ordered from Kiddie and the paperwork to authorize constr ction is in the approval cycle. The new material is scheduled for delivery by August 15, 1984. With this material delivery schedule, the project will be completed and placed in service during October 1984. The equipment purchased and being installed to detect the oil mist (Item #7) was "first of kind" equipment and with all first of kind equipment there is an element of uncertainty when applying it to resolve a specific problem. We should therefore be prepared to expect a period of time during which adjustments and modifications may have to be made to make this equipment reliable.

The construction work associated with Item #10 was completed. The equipment has not been placed in service as the cold checkout and functional tests have not been completed. The personnel responsible for this work have been advised to complete the tests and place this equipment in service during July 1984.

In 1978 when these commitments were made to the NRC, the Nuclear Engineering Division was under different executive management, and for whatever reason, no formal commitment date or priority for completion of this work was established. Even though no formal commitment dates were established, PSC has completed 14 of the 17 items within a reasonable time. We have worked on the remaining three items, with varying degrees of success due to setbacks caused by factors beyond our control, indicating that regardless of firm commitment dates, the commitment to NRC to complete the project has not been overlooked. As previously stated, Item #10 will be completed this month and Items 7 & 8 will be completed during October 1984.

I must presume this covers the six items you were concerned about and mentioned in our meeting on June 25, 1984.

B. BUILDING 10 LICENSING REQUIREMENTS

The subject of whether Building 10 was properly completed under the provisions of 10 CFR Part 50.59, or whether PSC should have applied for a plant modification license amendment to build Building 10 under the provisions of 10 CFR Part 50.54(f) was discussed. I subsequently received your letter, John T. Collins to O. R. Lee, G-84208, dated the day of the meeting, June 25, 1984, requesting a response to this and related issues by July 25, 1984. The requested response is being prepared and will be submitted by July 25, 1984.

C. NRC NOTIFICATION OF CONTROL ROD FAILURE TO SCRAM

At our meeting on June 25, 1984, you questioned whether the PSC shift supervisor on duty Saturday morning, June 23, 1984, when six control rod pairs failed to scram, consciously chose not to report the failure of the rod pairs to scram to the NRC.

The PSC shift supervisor did, of course, notify the NRC duty officer of the scram event, including the reactor conditions and the cause of the scram, immediately after completing the actions necessary to safely shutdown the reactor. During the scram event, the shift supervisor correctly observed that the reactor was shutdown by an adequate margin even with the six rod pairs failing to scram. Furthermore, the six rod pairs were driven into the reactor core shortly after it was observed that they had failed to properly insert upon receiving the scram signal. All of these immediate actions had been completed by the time the shift supervisor notified the NRC duty officer of the scram event.

My personal review of the circumstances surrounding the actions taken by the PSC shift supervisor during and after the scram event disclosed the following:

- 1. Due to the difficulties encountered by the PSC shift supervisor in communicating with the NRC duty officer, who was not familar with HTGR terminology, the actual scram event notification process was extremely arduous. As a consequence, the notification did not facilitate a detailed and complete understanding of the scram event, and did not cover the failure of the six rod pairs to scram, which by that time had been properly mitigated.
- 2. With respect to the failure of the six rod pairs to scram, the PSC shift supervisor made the determination that the situation involved a maintenance problem, and the failure was treated accordingly. Plant Trouble Reports, PTR 6-753 through PTR 6-758, were routinely initiated for each of the six rod drives that failed to scram, and the PTR's were approved by the shift supervisor during the shift. It should be noted that the NRC's SRI frequently reviews PTR's, a fact known to the shift supervisor. A person consciously attempting to avoid notifying the NRC of a Fort St. Vrain problem would certainly not initiate a PTR on the problem.
- 3. Subsequent to the scram evert but prior to the conclusion of the shift, the PSC shift supervisor directed the reactor operator to make an entry in the R.O.'s log that it was necessary to manually insert the rods in the six affected regions to get the "rod in" lights. A copy of the log is routinely furnished to the NRC's SRI on a daily basis, a fact also known to the shift supervisor. A person consciously attempting to avoid notifying the NRC of a Fort St. Vrain problem would certainly not have a log entry made recording the problem.

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In conclusion, my review did not disclose that there was any indication of a conscious attempt by the PSC shift supervisor to avoid notifying the NRC of the failure of the six rod pairs to scram. The reactor scram immediate reporting requirements (in the absence of any Technical Specification violations or continuing conditions that would constitute an unusual event) did not focus on the failure of the six rod pairs to scram, particularly since the rod pairs had been successfully inserted manually. When other PSC management personnel approximately eight hours later became aware that the NRC had not been notified that six rod pairs had failed to scram, it was their judgment that even if notification of the NRC was not explicitly required, in this case NRC notification was warranted. Consequently, notification of the failure of the six rod pairs to scram was provided to the NRC. Having the opportunity to reflect on the

implications of the circumstances which arose during the scram event, I agree that it would have been better if the PSC shift supervisor had reported the failure of six rod pairs to scram to the NRC duty officer.

D. DOCUMENTATION OF DISCIPLINARY ACTIONS

Regarding the NRC's request to use the documentation of disciplinary actions in personnel records to verify the completion of disciplinary actions, I have contacted our attorney as I indicated I would. He is studying the legal implications of the NRC's request for access to this documentation. After an initial review, he has asked for additional time to complete his legal review of this matter. Once we have received our attorney's legal advise, I am confident we will be able to reach agreement on a mutually acceptable and legally proper resolution of the NRC's request.

E. CLEARANCE TAGS

In response to your inquiry concerning clearance tags that are several years old, a program has been initiated to ensure the currentness of these tags. Under this program older tags will be removed and new tags will be placed on the affected equipment.

F. RADIOLOGICAL EMERGENCY EXERCISE SCENARIO

You inquired as to when PSC would be providing the background information for the 1984 Fort St. Vrain Radiological Emergency Exercise. The required information was provided to Mr. Eric Johnson (NRC) in a letter from Mr. Don Warembourg (PSC), P-84170, dated June 11, 1984. A copy of this letter was also sent directly to Mr. James Montgomery on June 11, 1984. Letter #P-84194

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G. TEMPORARILY INSTALLED CONTROLLER IN LN2 SYSTEM

Your mention of the controller, hung with bailing wire, during the June 25, 1984 meeting precipitated a review to determine why this device was installed in 1980, and why it remains in service on a Temporary Change Request (TCR) after four years. The original design of the LN2 storage tank had a Foxboro level control system to automatically transfer LN2 from the outside tanks to the indoor storage/surge tank. That system failed and our operating personnel installed a replacement system on an emergency basis using the TCR to document and justify the work.

The temporarily installed equipment has been operating satisfactorily. A major project to modify the LN2 system was being considered in 1981 and it was therefore decided to incorporate the temporary change into a permanent modification along with the overall system modification. The system modification was scheduled to be done during the 3rd refueling.

A great number of equipment changes were involved in the modification of different portions of the LN2 system. As a result of the time and difficulties involved in physically modifying the whole system, it was determined just prior to the third refueling that only a small portion of the system would be modified during this refueling. These limited modifications did not encompass that portion of the LN2 system which included the temporary controller.

PSC Engineering will review the temporary controller and the LN2 system modifications yet to be completed and determine if the system modification to be done during 4th refueling will encompass the temporary controller. If it does not, we will proceed with a plan to make the temporary controller permanent no later than the 4th refueling. In the interim, the controller will be more securely mounted.

If you have any questions concerning these responses, please contact either C. H. Fuller at (303) 785-2223 x202, or M. H. Holmes at (303) 571-8409.

Very truly yours,

O. R. Lee, Vice President Electric Production

ORL/MHH:km