



Nuclear Division
P.O. Box 4
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Telephone (412) 456-6000

April 28, 1982

Director of Nuclear Reactor Regulation
United States Nuclear Regulatory Commission
Attn: Mr. Darrell G. Eisenhut, Director
Division of Licensing
Washington, DC 20555

Reference: Beaver Valley Power Station, Unit No. 1
Docket No. 50-334, License No. DPR-66
NUREG-0737; items II.F.2 and II.B.2

Gentlemen:

The following information is being provided to 1) indicate our position on item II.F.2 with regards to our original schedule, the present status and the current regulatory environment on this issue and 2) to correct information provided in our submittal of April 16, 1982 regarding item II.B.2 which was in response to your letter of March 17, 1982.

II.F.2 Instrumentation for Detection of Inadequate Core Cooling

In our submittal of June 26, 1980, we indicated that we were purchasing the Westinghouse Reactor Vessel Level Instrumentation System and that it would be installed during our second refueling outage. In our response (December 17, 1980) to your letter of October 31, 1980 (NUREG-0737) we stated we would meet the implementation schedule of NUREG-0737, January 1, 1982, for installation of this system to satisfy the requirement of providing additional instrumentation to provide an indication of inadequate core cooling. We indicated that engineering and design work was in progress at that time. We re-stated that commitment in our letter of December 30, 1981 when we addressed all NUREG-0737 items which required installation by January 1, 1982 and indicated the power station was presently in its second refueling and modification outage, and this work would be completed prior to start-up.

During the installation of RVLIS, we have encountered substantial engineering problems which have delayed this job to the extent that we will be unable to complete installation of this system prior to start-up for Cycle 3 operation. We will complete installation of this system during the third refueling outage.

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All connections to the Reactor Coolant System providing pressure sensing locations for RVLIS have been installed and capped. One run of capillary tubing inside containment has been started and support plates and angles in the refueling cavity have been installed. The work completed outside containment includes the pressure transmitters, supports, isolators and capillary tubing from the containment penetrations to the isolators and from the isolators to the transmitters. The microprocessor has been installed with some wiring complete. The system is approximately 70 percent complete at this time.

As you are aware, the schedule for this system has been under review by the Advisory Committee on Reactor Safeguards and has resulted in the Staff recommendation that the existing implementation schedule be replaced with a new schedule of the first refueling after January 1, 1983. This was determined as an acceptable schedule following the Staff's review of the industry's progress in the development and installation of RVLIS and was documented in your letter of March 17, 1982 (Generic Letter No. 82-05). We believe our revised schedule is consistent with Staff concerns.

During a LOCA, there are two possible modes of operation which assure an adequate coolant inventory for heat removal. The first condition would be one whereby the injection flow is greater than the break flow. In this case, pressurizer level and an adequate subcooling margin would be attained at a reduced system pressure. The second case would be one where pressurizer level and a subcooling margin could not be maintained due to break flow being greater than injection flow in which case the operator is required by procedure to maintain full injection flow to the reactor coolant system. We believe that RVLIS will assist the operator in evaluating safeguards systems performance during a LOCA but is not essential for mitigating the consequences of any accident. The operators primary concern during a LOCA is the maintenance of full injection flow to the coolant system. With this flow verified, there is a minimal amount of useful information that can be derived from RVLIS during a LOCA since the operator is physically doing all that is necessary to provide core cooling.

We will complete the installation of the reactor vessel head vent system during the current outage. This system will provide us with the ability to vent non-condensable gasses for any accident that has the capacity to produce them in such quantity that core cooling, during a LOCA, could be interrupted.

A reactor vessel level instrument is an aid, but not a necessity in the detection of the onset of inadequate core cooling. It is our position that resuming operation without RVLIS will not decrease our margin of safety during Cycle 3 operation.

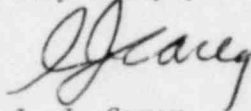
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II.B.2.2 Plant Shielding; Modifications

Our submittal of April 16, 1982 was in response to your letter of March 17, 1982, Generic Letter No. 82-05, Post-TMI Requirements. It was requested that we identify specific NUREG-0737 items which were complete. Our submittal stated that modifications satisfying this NUREG item were complete. Our submittal of June 30, 1981 included a description of those design changes necessary to satisfy the results of the plant shielding study. The modifications for installing the shielding between the Hydrogen Recombiner Control Panels and the Low Head Safety Injection lines and the modification to add a remote operator on the containment air manual cross-connect valve have been completed. The modification to change the Hydrogen Recombiner Manual Isolation Valves to remote operated valves has not been completed. Our original intent was to install motor operators on these valves, however, we have changed our approach and are now installing reach rods. The materials are on site and we expect to finish this modification prior to start-up from our second refueling outage.

If you have any questions, please don't hesitate to call my office.

Very truly yours,



J. J. Carey
Vice President, Nuclear

cc: Mr. D. A. Beckman, Resident Inspector
U. S. Nuclear Regulatory Commission
Beaver Valley Power Station
Shippingport, PA 15077

Mr. Ronald C. Haynes, Regional Administrator
U. S. Nuclear Regulatory Commission
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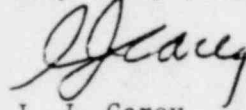
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