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Mr. B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: LaSalle County Station Units 1 and 2
Piping Vibration Monitoring
NRC Docket Nos. 50-373/374

Dear Mr. Youngblood:

In recent discussions with members of your staff, Commonwealth Edison has requested deferral of a portion of the piping vibration test discussed in Chapter 14 of the FSAR until such time as all seismic and other related dynamic supports have been installed. Specifically, it is requested that the subject vibration testing of piping systems be postponed from the preoperational to start-up testing phase, with the understanding that startup would not continue past fuel loading until this testing has been completed. The technical basis for this postponement is justified in the discussion which follows.

The final piping analysis and support design to reflect the Design Basis Summary Loads and the "for record" configuration for LaSalle County Station are currently in progress. Since some changes to the piping support systems are expected to result from these analyses and since many of the pipe supports for the SRV/LOCA dynamic loads have not yet been installed, the vibration preoperational testing programs outlined in preoperational test procedure PT-SI-102 can not now be performed. Although these dynamic supports do not usually bear the weight of the piping, they do influence the frequency of the system; and, therefore, could change drastically the systems response to vibrational loads. Thus, in order to evaluate a system for vibration response the dynamic pipe supports must be in place.

However, critical path considerations dictate that the preoperational system test to validate system performance be performed. Therefore, it is necessary to request NRC acceptance of performing the vibration tests just prior to or during fuel loading. All pipe supports will be installed at the time this test is performed; therefore, the vibration monitoring test will more

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accurately reflect the operating conditions of the system to be tested. The systems are HPCS, LPCS, RHR, CSCS-ECWS and Standby Liquid Control. The reactor recirculation system listed in PT-SI-102 was tested for vibration as part of its preoperational test.

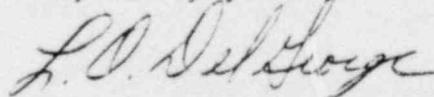
The preceding discussion establishes the need for performing these vibration tests after the system performance tests have been completed. The following discussion justifies the performance of these tests after the preoperational test.

The first consideration that should be noted is that all weight supports are in place when the system performance preoperational tests are done. Thus, the piping is adequately supported for the weight and thermal loads that result from the test. Only the supports for the dynamic loads (seismic, SRV and LOCA-related hydrodynamic loads) are not yet installed. Therefore, the normal preoperational testing in no way jeopardizes the integrity or function of the system. Secondly, during the performance tests, the piping systems and equipment are visually examined for excessive vibration. If excessive vibrations occur, the test is discontinued until the problem can be corrected. This visual inspection for excessive vibration is included as part of the system preoperational test procedure and ensures that no vibration damage to the piping or equipment can occur during the performance of the functional test.

In addition, it should be noted that the adverse effects of excessive vibration are usually manifested on a long-term basis. The cyclic nature of vibrational loads indicates that they primarily affect the fatigue life of the piping. A large number of stress cycles must be accumulated by the piping before a fatigue failure can be expected to occur. This is especially true for low stress levels. The fact that the piping is visually examined for excessive vibration during the performance tests verifies that only low level vibrational stresses are likely to exist during the test. Because the preoperational system performance tests do not represent an extended operating period, their effects on fatigue life are minimal.

For these reasons, we request NRC acceptance of the postponement of the vibration testing of piping systems from the preoperational to start-up testing phase, with the understanding that startup would not continue past fuel load until this test is completed. The justification herein provided should establish an adequate basis for acceptance of this request.

Very truly yours,



L. O. DelGeorge
Nuclear Licensing Administrator