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U. S. Nuclear Regulatory Commission Att: Document Control Desk Washington, DC 20555

Gentlemen:

Subject:

Oyster Creek Nuclear Generating Station (OCNGS)

Docket No. 50-219

Facility Operating License No. DPR-16

Control Rod Drive Scram Solenoid Pilot Valves

with Viton Internals

The BWR Owner's Group (OG) letter dated February 16, 1996 provided recommended guidance related to testing of dual type ASCO scram solenoid pilot valves (SSPV) with Viton internals and testing of the Alternate Rod Insertion (ARI) system. This recommended guidance was developed as a result of concerns identified in NRC Information Notice 96-07, "Slow Five Percent Scram Insertion Times Caused By Viton Diaphragms in Scram Solenoid Pilot Valves", dated January 26, 1996. BWROG letter to the NRC dated February 2, 1996 previously provided this guidance for NRC review.

In response to the BWROG recommendations, GPU Nuclear plans to test both the 5% Reference Sample and 10% Representative Sample of Viton SSPV control rods at approximate 90-day intervals considering the existing OCNGS Technical Specification provision for surveillance interval tolerance. This frequency will minimize the impact of testing by combining these tests with the quarterly main steam isolation valve (MSIV) test power reduction. The test program is scheduled to commence in April 1996 concurrent with the next planned power reduction for MSIV testing. The 5% Reference Sample will consist of seven (7) designated control rod drives for which scram time data has already been obtained during the current operating cycle. The 10% Representative Sample will consist of fourteen (14) control rod drives selected at various core locations in order to minimize drive movements and potential operator challenges. The 10% Representative Sample population of control rod drives for subsequent tests will continue to be selected based on these considerations while proceeding through the core population. Since all SSPVs installed at OCNGS contain Viton diaphragms, the Weighted Core Average Scram Time will be calculated as the average of all data points taken during testing. The existing

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OCNGS Technical Specification limit for average 5% insertion time is 0.375 second. Any control rod drive with a 5% scram time greater than 0.49 second will be declared inoperable as recommended by the BWROG guidance.

OCNGS currently performs ARI logic testing on a quarterly basis and ARI valves are tested during refueling outages. These existing periodic surveillances of the ARI logic and valves satisfy the BWROG recommendation related to the ARI system.

As described above, the planned 5% Reference Sample and 10% Representative Sample control rod drive testing will be performed at 90-day intervals to coincide with scheduled power reductions for MSIV testing. This test schedule will result in more frequent testing of the 10% Representative Sample and less frequent testing of the 5% Reference Sample when compared to the BWROG recommended test frequency of 120 days and 60 days, respectively. However, the selected test schedule for OCNGS will minimize the number of test evolutions and core manipulations, while providing more individual data points over the duration of the operating cycle and will test all control rod drives sooner than the BWROG plan. The OCNGS planned test schedule also verifies Technical Specification compliance every 90 days rather than every 120 days.

OCNGS operating Cycle 15 post-maintenance scram testing, as well as the December 18, 1995 reactor scram, has provided 5% scram time data for approximately thirty-two (32) control rod drives. Analysis of this data indicates that the average 5% scram time was less than that obtained at the beginning of Cycle 14 (prior to installation of the Viton diaphragms). Review of twenty-four (24) control rod drive 5% scram times obtained from the December 18, 1995 scram from full power indicates that the average scram time change from the beginning of Cycle 15 was an increase of 0.0015 seconds. This average increase in Cycle 15 observed scram time is not considered significant.

The above SSPV test program may be revised or discontinued upon future installation of new replacement solenoid valve diaphragms or if this testing provides sufficient data to reasonably demonstrate that scram time degradation due to the SSPV Viton internals is not occurring. GPU Nuclear will advise NRC of any changes to the OCNGS SSPV test program.

If any additional information is needed, please contact Mr. David J. Distel at (201) 316-7955.

Sincerely,

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M. B. Roche

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Vice President and Director

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