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U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

Gentlemen:

Subject: Oyster Creek Nuclear Generating Station (OCNGS)
Docket No. 50-219
Facility Operating License No. DPR-16
Oyster Creek Containment Isolation Valves

References: (1) GPUN Letter RFW-0620 dated September 24, 1985, "Containment Vent and Purge System".

(2) NRC Letter dated October 10, 1986, "Containment Purge and Isolation Valves (MPA B-24, TAC 59828)".

Reference 1 reiterated GPU Nuclear's commitment to limit the open position of the Drywell Purge Valves (V-23-13 and V-23-14) and the Torus Purge Valves (V-23-15 and V-23-16) to 30 degrees with closing times not to exceed 15 seconds. This position was determined to be acceptable in the Reference 2 Safety Evaluation "...until such time as the valves are demonstrated qualified or replaced by qualified valves". Consistent with this commitment, GPU Nuclear plans a change to limit the opening position for valves V-23-13, 14, 15 and 16 to 75 degrees with closing times not to exceed 60 seconds. The qualification for this change is based upon upgrades being performed to these valves as part of the scheduled 14R Outage hardened vent modification.

Currently, the containment isolation valves V 23-13, 14, 15 and 16 are limited to a 30 degree open position to insure that these isolation valves can close against the dynamic forces of a Design Basis Accident (DBA). However, NRC criteria for the hardened vent design requires venting the primary containment (torus) equivalent to 1% decay heat during a TW sequence. Satisfying this criterion necessitates opening of the subject isolation valves to a 75 degree position. GPU Nuclear has performed a calculation to qualify these valves to close (or open) from the 75 degree position in the event of an accident during start-up (inerting of the primary containment). This calculation determined that modifications to these valves are necessary to qualify the increased valve opening limit.

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The modification, scheduled to be performed during the 14R Outage, consists of replacing the taper pins that hold the disc to the shaft and replacing the shaft key with higher yield strength material. The existing material for the taper pin is 316 stainless steel and for the shaft key is SAE 1035. Both materials will be replaced with 17-4 PH Conditioned H1075, SA564. In addition, to ensure that the containment isolation function of these valves is maintained, the current nitrile seat material will be replaced with viton material which is rated for a temperature of 400 degrees F. All other existing valve components are capable of withstanding the process temperature of 305 degrees F.

With the valve opening position increased to 75 degrees, the closure time for these isolation valves will be longer. The current actual closure times for these valves are 8.4, 9.0, 3.5 and 12 seconds for V-23-13, 14, 15 and 16 respectively. The new closure time for these valves from the 75 degree open position is expected to be less than 60 seconds. Upon implementation of this modification, these isolation valves will be tested to establish the new actual closure times.

These valves are only used when inerting the primary containment. During inerting, the nitrogen inerting pressure is maintained at approximately 60 psig. In the event a DBA occurs during inerting, the escaping gas through the closing valve will either be pushed backed by the 60 psig nitrogen pressure or contained in the nitrogen piping which is a closed system. Since these isolation valves are connected to a closed system, the new closure time of the isolation valves will not increase the amount of containment atmosphere that may be released during a DBA before valve closure.

If you have any questions or comments on this submittal, please contact Mr. Michael Laggart, Manager, Corporate Nuclear Licensing at (201) 316-7960.

Very truly yours,

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Technical Functions

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