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April 16, 1990

U.S. Nuclear Regulatory Commission
Mail Station P1-137
Washington, D.C. 20555

Attention: Document Control Desk

Gentlemen:

SUBJECT: Grand Gulf Nuclear Station
Unit 1
Docket No. 50-416
License No. NPF-29
High Groundwater Elevation
AECM-90/0062

On March 20, 1990, dewatering well-8 was removed from service to determine an approximate rate of groundwater level increase without exceeding the 109.0 feet Mean Sea Level (MSL) design basis. This observation was initiated to support planning for the installation of a flow meter which would require the dewatering well pump to be inoperable during portions of installation time. Following an elapsed time of four hours with the pump out of service, groundwater level exceeded the 109.0 feet MSL design basis by 0.8 feet. The pump was then placed back in service to restore groundwater level to within design basis limits.

On March 21, 1990 during installation of the flow meter, the groundwater level was monitored and the pump was operated as required to maintain groundwater level at a minimum. This effort required work to be interrupted and the pump to be temporarily restored to service each time ground water-level approached 109.0 feet. During this evolution, 109.0 feet MSL was exceeded several times before the pump could be restarted and the well pumped down. The maximum level reached was 109.6 feet MSL. After installation of the flow meter was complete, dewatering well 8 was returned to normal service and groundwater level returned below the 109.0 feet MSL design basis limit.

The pump at dewatering well-8 was removed from service again on April 5, 1990, due to a loss of continuity in a level sensor cable. This failure caused a loss of automatic pump operation. A temporary replacement cable was obtained and installed on April 9, 1990 to restore the pump to service. While the pump was inoperable, the groundwater level rose to approximately 109.6 feet. The occurrences of groundwater level increases are reported as requested by your letter dated August 19, 1985 (MAEC 85/0284).

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An engineering study was performed in 1985 to determine the sensitivity of Grand Gulf Nuclear Station (GGNS) Unit 1 buildings to a maximum groundwater elevation of 114.5 feet MSL. The study concluded that the structural integrity of the Unit 1 buildings would not be impaired. This information was previously submitted by letter dated February 14, 1985 (AECM 85/0035).

Yours Truly,

WTC:cg

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