

SNUPPS

Standardized Nuclear Unit
Power Plant System

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Nicholas A. Petrick
Executive Director

May 23, 1984

SLNRC 84-0085 FILE: 0278
SUBJ: Callaway Plant Ultimate
Heat Sink Technical
Specification Requirements

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Docket No.: STN 50-483

Dear Mr. Denton:

Based on discussions with the NRC Staff, the Technical Specification requirements for Ultimate Heat Sink (UHS) in the final draft Callaway Plant Technical Specifications have been modified to reflect as-built plant conditions.

As noted in section 9.2.5 of the Callaway FSAR Site Addendum, the UHS retention pond is sized for two 3425 MWT nuclear units. Although Callaway Plant Unit No. 2 was cancelled, the retention pond was completed to the original design and is sized to include capacity (with excess margin) for two units.

In the NRC Safety Evaluation Report related to operation of Callaway Plant Unit No. 1 (NUREG-0830, October 1981), the NRC Staff stated that an independent assessment of UHS performance was not made because of the significant margin available in the retention pond over the requirements for one unit. Therefore, retaining most of this significant margin, the NRC staff established the UHS minimum water depth requirement in the final draft Technical Specifications for Callaway Unit No. 1 at 16 feet above the pond bottom.

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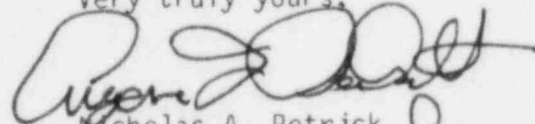
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A calculation has been performed to determine the appropriate UHS water level for a single 3425 MWT unit. The calculation used the same conservative analytical methods described in the SNUPPS FSAR and Callaway FSAR Site Addendum for the two-unit calculation. The result of this calculation is a UHS water level of 9.75 ft. To this level, an additional 50% margin has been added to establish a new Technical Specification limit of 13.25 ft. The enclosed figure reflects the results of the calculation for one nuclear unit.

The retention pond makeup control system setpoints for makeup initiation and makeup termination as well as the low level alarm setpoint can be adjusted continuously throughout the range of levels required to assist plant operators in complying with the UHS Technical Specification requirements for minimum level. The revised setpoints have not been determined at this time; however, it is expected that these setpoints will be adjusted to provide additional plant operational flexibility consistent with the Technical Specifications.

The Callaway FSAR Site Addendum will be revised in the future to incorporate the above information.

Very truly yours,

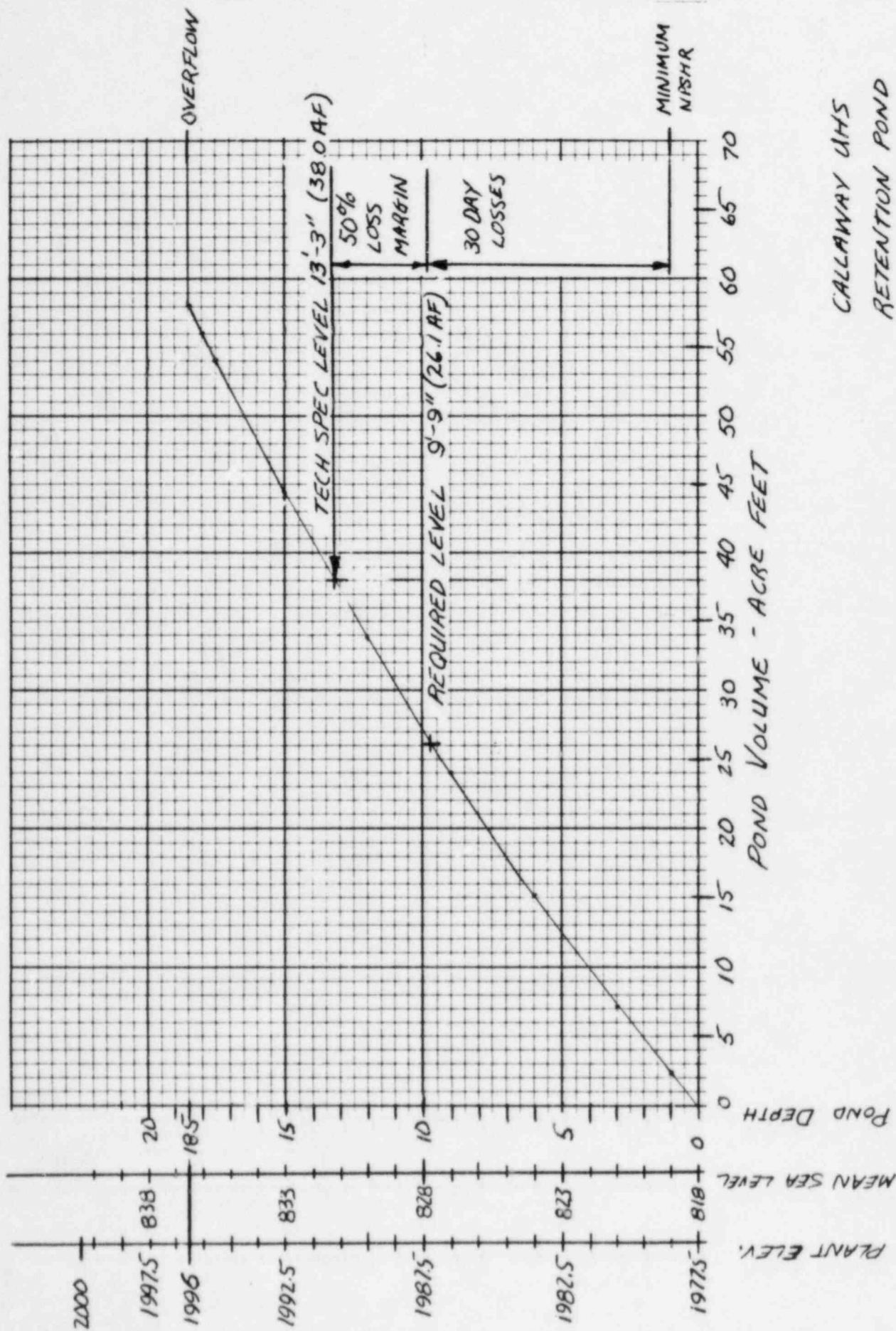


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MHF/nld/10a20
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UE
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USNRC/RIV



CALLAWAY UHS
RETENTION POND
LEVEL VS VOLUME