NRC INSPECTION MANUAL

PART 9900: TECHNICAL GUIDANCE

STS428.TG

STANDARD TECHNICAL SPECIFICATIONS SECTION 4.2.8.X.X. SURVEILLANCE REQUIREMENTS - 125-VOLT BATTERY BANK

A. PURPOSE

Provide guidance to the inspector regarding information that should be included in surveillance test procedures for determining electrolyte level in stationary batteries.

B. DISCUSSION

Section 4.2.8.X.X. of the Standard Technical Specifications (STS) requires periodic determinations of the electrolyte level in each pilot cell and each connected cell of the station battery. The Gould Battery Company has developed specific criteria which is used to determine the electrolyte level needed to ascertain the true specific gravity of the electrolyte. The true specific gravity is an indicator of cell capacity and any downward change denotes a need for corrective action. The criteria are applicable to all wet storage batteries and include the type of information that should be incorporated in licensee surveillance test procedures. The Gould criteria are as follows:

- 1. Electrolyte levels should be recorded and specific gravity readings adjusted accordingly.
- 2. Electrolyte levels should be recorded only when the cells are in a floating mode of operation.
- 3. Electrolyte levels should be recorded monthly as stated on IEEE-450.
- 4. Electrolyte levels should be recorded any time that a true specific gravity reading is required. The true specific gravity reading is needed to determine if there is a downward change in cell capacity. This will indicate corrective action and eliminate battery problems.
- 5. If a battery has received an equalize charge, the electrolyte levels should not be taken until the cell has been placed on

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float for a minimum of 72 hours after completion of the equalize charge.

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C. REFERENCE

Ltr. W. Hurley, Gould, to F. Maura, RIII, dtd 6/15/79

END

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