

**DUKE POWER COMPANY**

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HAL B. TUCKER  
VICE PRESIDENT  
NUCLEAR PRODUCTION

34 SEP 10 1984  
August 28, 1984

TELEPHONE  
(704) 373-4531

Mr. James P. O'Reilly, Regional Administrator  
U. S. Nuclear Regulatory Commission-Region II  
Suite 2900  
101 Marietta Street, NW  
Atlanta, Georgia 30323

Subject: McGuire Nuclear Station Unit 1  
Docket No. 50-369  
LER/RO-369/82-66

Dear Mr. O'Reilly:

The following is additional information relating to Reportable Occurrence Report RO-369/82-66 which was submitted by my letter dated September 10, 1982 and subsequently amended by my letter of October 28, 1982.

RO-369/82-66 reported failures of the Ventilation Unit Condensate Drain Tank (VUCDT) Flow Totalizer in which the totalizer either failed to count during a VUCDT to Condenser Circulating Water (RC) release, or continued to count slowly after termination of a release. Two additional failures were reported in the October 28, 1982 addendum.

The totalizer has experienced a series of malfunctions beginning in 1981, with many of the causes undetermined. In some cases, the totalizer continues to register after the isolation valves have been closed, and in other cases the totalizer fails to register when the isolation valves are open and tank discharge is in progress. Numerous attempts have been made to correct these problems; however, to date no definitive corrective action has been accomplished. Periodic test frequency has been increased to every three months with additional preventative maintenance performed every eighteen months.

In August of 1981, a Barton transmitter was replaced with a Rosemont transmitter (to increase stability) after a vacuum in the waste liquid (WL) system allowed a continuous differential pressure across the bellows to exist causing the totalizer to continue to count. Pump head curves, which are conservative, are presently used to calculate releases.

An evaluation of the problems which have occurred over the years indicate that the presently installed equipment is inadequate for the application. A Modification that will replace the Rosemont transmitter with a vortex meter is presently being evaluated. The vortex meter has an in line probe attached to the totalizer which terminates flow totals when flow is isolated. The absence of the bellows should eliminate dry or partially filled reference legs thus preventing vacuums and differential pressures.

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A final report will be submitted following the completion of this modification and will detail the effects of its operation.

Very truly yours,

*H. B. Tucker*

Hal B. Tucker

PBN:glb

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