

50-237

Commonwealth Edison Company

ONE FIRST NATIONAL PLAZA ★ CHICAGO, ILLINOIS

Address Reply to:

POST OFFICE BOX 767 ★ CHICAGO, ILLINOIS 60690

May 31, 1972

Not an incident



Mr. Donald J. Skovholt
Assistant Director for Operating Reactors
Directorate of Licensing
U.S. Atomic Energy Commission
Washington, D.C. 20545

Subject: Results of Dresden Unit 2 Torus Inspection

Dear Mr. Skovholt:

The results of the Dresden Unit 2 torus inspection are provided in reply to your letter dated March 13, 1972 and supplemental to our responses of March 24 and April 6, 1972.

The Dresden Unit 2 torus inspection was completed April 4, 1972. No indications of structural distress were discovered on the baffles, baffle support bolts, or electromatic relief valve piping supports. This inspection involved visual examination of every baffle support bolt for integrity and tightness. Only one broken bolt was discovered and it was replaced. On the basis of the satisfactory results of this inspection, the conclusion is the design of the baffles and supports are adequate and no further inspection is necessary.

The relief valve piping supports in the Dresden Unit 2 and 3 tori are similar in concept to the revised design used at the Monticello plant.

The design of the relief valve piping was revised in spring 1971 to minimize any possible detrimental effects of relief valve steam on the torus coating. This optimization was achieved by relocation of the vent pipe discharge to provide even further assurance of complete steam suppression in the torus. The discharge was originally located approximately three feet below the suppression pool surface near the inner wall. By moving the vent to about nine feet below the water surface at the torus centerline, and making the

8304220207 730713
PDR ADDCK 05000237
PDR

50-237
incident
COPY SENT REGION

30057

Mr. Donald J. Skovholt

- 2 -

May 31, 1972

discharge tangent to the torus wall in both directions, the momentum of the jets will promote good tangential mixing; also natural convection of heated water rising in the center of the pool will ensure strong radial convection of the torus wall, thereby thoroughly mixing in the radial direction as well.

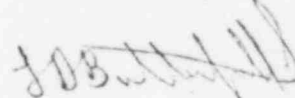
This design has the effect of reducing the reaction forces and minimizing the amount of bracing required to hold the pipe in place. The supports provided at the discharge piping elbow are designed to withstand up to 25,000 lbs. of force produced along the axis of the pipe immediately upstream of the "tee". Calculations show that the maximum force which could be produced is less than 10,000 lbs. Additionally, stiffeners are placed at the piping "tee" as a precautionary measure to provide additional bracing against possible discharge differentials. Analysis shows that these differentials can never exceed 1000 lbs., which is well within the design capability of the supports (2000 lbs.).

As the preceding discussion demonstrates, the modified electromatic relief valve discharge piping in Dresden Station Unit 2 and 3 tori are provided with sufficient bracing to withstand all forces associated with relief valve discharges into the suppression pool.

Based on the results of the Dresden 2 inspection, the program for inspecting the Dresden Unit 3 torus remains the first refueling outage, presently scheduled for the fall of 1973. This is consistent with the schedule as submitted to you in our April 6, 1972 letter.

Should you require any additional information, please let me know.

Very truly yours,



L. D. Butterfield, Jr.
Nuclear Licensing Administrator