

Commonwealth Edison Company

ONE FIRST NATIONAL PLAZA ★ CHICAGO, ILLINOIS

Address Reply to:

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Dresden Nuclear Power Station
R.R. #1
Morris, Illinois 60450
December 18, 1970

Dr. Peter A. Morris
Director of Division Reactor Licensing
U.S. Atomic Energy Commission
Washington, D.C. 20545

SUBJECT: LICENSE DPR-19, DRESDEN NUCLEAR POWER STATION UNIT #2, SECTION 6.5.3.1
OF THE TECHNICAL SPECIFICATIONS

Dear Dr. Morris:

This is to report a condition relating to the operation of the station which resulted in electromatic relief valve 2-203-3C (2C) failing to open during a functional test of the electromatic relief valves serving the automatic blowdown system.

Problem, Investigation and Corrective Action

The problem was discovered at 7:35 a.m. on November 19, 1970 during functional valve testing while the reactor was heating up. The testing was done to check valve operation following adjustments made on all valves during the November 14 to 18, 1970 scheduled outage. "C" relief valve failed to open during manual operation from the control room and all others operated satisfactorily. At 8:00 a.m. the reactor pressure was dropped to 300 psig from 500 psig. The HPCI turbine was put on turning gear at 8:40 a.m. in preparation for surveillance testing.

An inspection of the "C" relief valve at 9:00 a.m. revealed that a cotter pin had wedged between the solenoid guide post and the solenoid armature guide. The repair consisted of bending the cotter pin such that the exposed end could not wedge during subsequent operations. This cotter pin had been installed as part of the repair adjustment made on October 1, 1970 as reported in our letter of October 9. Plant operation was resumed following repair on November 19, 1970.

As a result of this failure and several other failures previously reported, during the current outage which began on December 7, a complete review of the problems and all possible causes of the problems was made, and appropriate corrections made as follows:

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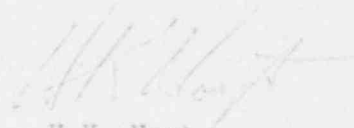
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1. Pilot valve travel adjustments were reviewed and correct settings of 3/16" to 7/32" as made on 11/14-18/70 outage were verified correct. The operating linkage clearance was checked on 11/14-18/70 so that the linkage and pilots were all free to move the full pilot travel. Also on 11/14-18/70 the guide post wear was checked.
2. A new solenoid kit was installed to correct the solenoid guide post wear problems reported in our letter of October 9, 1970. The kit replaces the hollow guide post with a solid stainless steel post. The solenoid armature guide plate is replaced with one having bronze bushings about 1/2" long to eliminate wear on the guide post. The cotter pins which previously existed to retain the armature guide plate have been eliminated. The strike roller which actuates the pilot valve operating lever now also acts as the upper limit stop for the armature.
3. A switch which de-energizes the armature closing coil at the full extended position was found on the "C" valve to occasionally stick in its de-energizing position which could have caused a malfunction. Clearances were increased to avoid this possibility on all valve pilot solenoids.

It is now considered that appropriate corrections have been made to eliminate previous problems which have been experienced and that the valves should be dependable for subsequent operation.

All the valves will be functionally tested during startup to assure operability following the above noted maintenance on valve components.


H.K. Hoyt
Superintendent

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