



January 27, 1977



Mr. Benard C. Rusche, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Subject: Dresden Nuclear Power Station Units 2 and 3  
Proposed Amendment to Appendix A Technical  
Specifications to Licenses DPR-19 and DPR-25  
to Permit Recoupling of Control Rods  
NRC Docket Nos. 50-237 and 50-249

Dear Mr. Rusche:

Pursuant to 10 CFR 50.59, Commonwealth Edison Company proposes to amend Section 3.3.B of Appendix A to the Technical Specifications for facility operating licenses DPR-19 and DPR-25. This change would allow recoupling of control rods under conditions of all rods in or greater than 20 percent power.

These conditions were chosen to minimize the potential effects of a rod drop accident by permitting recoupling only during this period.

Control rod uncoupling had occurred when the control rod inner filter became unseated and the control rod was withdrawn to the full out position. The control rod inner filter differential pressure has increased after long periods of operation and this high differential coupled with a shock to the drive, such as experience during a scram, can unseat the filter. When the control rod is subsequently withdrawn to the full out position, the filter is resealed but pressure of the filter on the uncoupling rod can uncouple the control blade when in the fully withdrawn position.

Under the present specifications, recoupling is not addressed and it has thus been interpreted to prohibit recoupling.

When an uncoupling does occur, the rod must be fully inserted and the three symmetrical rods must likewise be inserted to preserve the flux shape. The insertion of four control rods

Mr. Benard C. Rusche

- 2 -

January 27, 1977

has the potential for a significant reduction in plant output. The specification is needed in order to eliminate this potential derating if the control rod can be recoupled.

Attempting to recouple the control rod will not create the potential for an accident or transient not previously analyzed.

The potential for a rod drop is not significantly increased because the control rod will uncouple only in the fully withdrawn position and will recouple as soon as the control rod drive is inserted. Nothing in the procedure increases the potential for binding of the control blade.

The conditions under which the recoupling is permitted are selected to ensure that safety margins for the rod drop accident are maintained.

This change has received on-site and off-site approval. Because of the potential impact on unit output, prompt consideration of this proposal is requested.

Three (3) signed originals and 37 copies are provided for your use.

SUBSCRIBED and SWORN to  
before me this 27<sup>th</sup> day  
of January, 1977.

Nancy M. Hollingsworth  
Notary Public

Very truly yours,



R. L. Bolger  
Assistant Vice President

Enclosure: Page 56 to Appendix A for DPR-19 and DPR-25.

### 3.3 LIMITING CONDITION FOR OPERATION

#### B. Control Rods

1. All control rods shall be coupled to their drive mechanisms when the mode switch is in "Startup" or "Run". With a control rod not coupled to its associated drive mechanism, the following applies:
  - a. The rod shall be declared inoperable, fully inserted, and the directional control valves electrically disarmed until recoupling can be attempted at all-rods-in or at power levels above 20 percent power.
  - b. Unit operation may continue following above actions if the requirements of Specification 3.3.A are satisfied.
2. This requirement does not apply in the re-fuel condition when the reactor is vented.
3. The control rod drive housing support system shall be in place during reactor power operation and when the reactor coolant system is pressurized above atmospheric pressure with fuel in the reactor vessel, unless all control rods are fully inserted and Specification 3.3.A.1 is met.

### 4.3 SURVEILLANCE REQUIREMENT

#### B. Control Rods

1. The coupling integrity shall be verified for each withdrawn control rod as follows:
  - a. when the rod is withdrawn the first time subsequent to each refueling outage or after maintenance, observe discernible response of the nuclear instrumentation; however, for initial rods when response is not discernible, subsequent exercising of these rods after the reactor is critical shall be performed to verify instrumentation response; and
  - b. when the rod is fully withdrawn the first time subsequent to each refueling outage or after maintenance, observe that the drive does not go to the over-travel position.
2. The control rod drive housing support system shall be inspected after re-assembly and the results of the inspection recorded.