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February 1, 1990

Dr. Thomas E. Murley, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Subject: Dresden Nuclear Power Station Units 2 and 3  
ATWS Recirculation Pump Trip Technical Specifications  
NRC Docket Nos. 50-237 and 50-249

- Reference: (a) J.A. Silady letter to T.E. Murley, Director Office of Nuclear Reactor Regulation, "Dresden Nuclear Power Station Units 2 and 3 Proposed Anticipated Transient Without Scram Related Technical Specification Changes NRC Docket Nos. 50-237 and 50-249", dated September 29, 1989.
- (b) NSE-45-0880 MSIV Closure Event with ATWS/RPT and ARI for D2,3 and Q1,2 Nuclear Generating Plants, August, 1980.

Dr. Murley:

This letter responds to a request from the NRR Dresden Project Manager for additional information regarding the Reference (a) proposed Technical Specifications. This request involves further justification of the proposed Anticipated Transient Without Scram (ATWS) Recirculation Pump Trip (RPT) high pressure setpoint and the proposed ATWS RPT surveillance frequencies.

#### High Pressure Setpoint

Dresden's proposed Technical Specifications for ATWS RPT specified a high pressure setpoint of 1240 (+10, -10) psig which is the current setpoint that has been in use since the system was installed. This is in contrast to the General Electric Standard Technical Specification (GESTS) value of 1120 psig. The proposed value is supported by the Reference (b) General Electric analysis. This higher setpoint is designed to avoid ATWS RPT initiation during design basis pressurization transients, such as Load Reject Without Bypass. ATWS RPT initiation during these pressurization transients is

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undesirable since it will increase the severity of event. This adverse impact is of particular concern since a non-ATWS pressurization transient is considerably more likely to occur than a pressurization event with failure to scram.

With the proposed setpoint, the only non-ATWS pressurization transient that would result in an ATWS RPT initiation is the closure of all Main Steam Isolation Valves (MSIV) with a failure of the direct scram on MSIV valve position. This transient scenario (sometimes referred to as the "safety valve sizing event" or the "ASME overpressurization event") does not credit the Electromatic Relief Valves and assumes that the terminating scram signal is generated by high neutron flux. Although ATWS RPT initiation will cause the peak vessel pressure for this event to increase, margin to the ASME overpressure limit of 1375 psig is maintained. This margin has been, and will continue to be, verified for each new reload core design specifically including the effects of the ATWS RPT.

Although the proposed setpoint would increase the peak pressure during a limiting ATWS event (compared to ATWS peak pressure with the GESTS value) it will still remain below the ASME service level C overpressurization limit of 1500 psig based on the analysis given in Reference (b). The higher RPT setpoint used at the Dresden and Quad Cities units produces acceptable ATWS peak pressures primarily due to the larger total capacity of the 13 relief and safety valves compared to BWRs of similar vintage, which typically have fewer valves and lower overall capacity.

#### Surveillance Frequencies

The surveillance frequencies proposed in Reference (a) specified the currently applied intervals i.e., functional checks quarterly and instrument checks daily. This is in contrast to the GESTS surveillance frequencies which have a functional check monthly and an instrument check shiftly. The proposed frequencies are supported by General Electric recommendations provided in 1980 and are the surveillance frequencies that have been in place at Dresden since the installation of the ATWS RPT. A review of surveillance records going back to 1981 showed that there were no instances where the initiation setpoints had drifted beyond the proposed values. A review of Quad Cities surveillances showed similar results, with minimal or no adjustments needed over the past two years. This represents 22 reactor years of operation with no appreciable instrument drift. Based on the surveillance records, these frequencies are considered appropriate and commensurate with the design application and the fact that the RPT system is a backup to existing protective instrumentation.

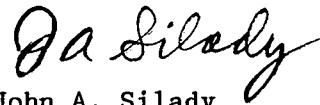
February 1, 1990

In summary, CECo believes that the current RPT pressure setpoint and surveillance frequencies are justified and should be utilized in the Technical Specifications. Use of GESTS values are not warranted based on:

- a) adverse impact of a lower setpoint on the peak pressure of design basis events which are more likely to occur than the limiting ATWS scenarios, and
- b) a large data base demonstrating acceptable instrumentation performance with the proposed surveillance intervals.

Please contact this office should further information be required.

Very truly yours,



John A. Silady  
Nuclear Licensing Administrator

cc: A.B. Davis - Regional Administrator, Region III  
B.L. Seigel - Project Manager, NRR  
S.G. DuPont - Senior Resident Inspector, Dresden

/lmw:0625T

January 26, 1990

Docket Nos. 50-237  
and 50-249

Thomas J. Kovach  
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Dear Mr. Kovach:

SUBJECT: GENERIC LETTER 89-16 - MARK I CONTAINMENT HARDENED VENT -  
DRESDEN UNITS 2 AND 3 (TAC NOS. 74864 AND 74865)

Your response to Generic Letter 89-16, Mark I Containment Hardened Vent, dated October 30, 1989, indicates that you have not committed to install the hardened vents on a voluntary basis. As noted in Generic Letter 89-16, the staff will complete a plant-specific analysis for Dresden Units 2 and 3. If the completed analysis supports the conclusion that modifications meet the NRC backfit rule, a copy of our analysis will be sent to you. This approach will provide you with another opportunity to voluntarily commit to make the requisite modifications under the provisions of 10 CFR 50.59.

Sincerely,

Original signed by.

Byron L. Siegel, Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III,  
IV, V and Special Projects  
Office of Nuclear Reactor Regulation

cc: See next page

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

January 26, 1990

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Sincerely,

A handwritten signature in cursive script, appearing to read "Byron L. Siegel".

Byron L. Siegel, Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III,  
IV, V and Special Projects  
Office of Nuclear Reactor Regulation

cc: See next page

Mr. Thomas J. Kovach  
Commonwealth Edison Company

Dresden Nuclear Power Station  
Units 2 and 3

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