



**Commonwealth Edison**  
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November 28, 1988

U.S. Nuclear Regulatory Commission  
Att: Document Control Desk  
Washington, D.C. 20555

Subject: Dresden Station Units 2 and 3  
Quad Cities Station Units 1 and 2  
Zion Station Units 1 and 2  
LaSalle County Station Units 1 and 2  
Byron Station Units 1 and 2  
Braidwood Station Units 1 and 2  
Response To NRC Generic Letter 88-11  
Docket Nos. 50-237/249, 50-254/265,  
50-295/304, 50-373/374, 50-454/455,  
50-456/457

Reference: NRC Generic Letter 88-11, dated July 12, 1988.

Dear Sir:

In accordance with Generic Letter 88-11, Commonwealth Edison has reviewed Regulatory Guide 1.99 Revision 2, May 1988, "Radiation Embrittlement of Reactor Vessel Materials," for its impact on pressure-temperature (PT) heatup and cooldown curves contained in the Technical Specifications for each nuclear unit. The results of our technical analyses are contained in this letter. It should be noted that Commonwealth Edison has been engaged in a continuing effort to address the overall impact of Regulatory Guide 1.99 Revision 2 on the evaluation of reactor vessel embrittlement. For each unit, Technical Specification compliance with Revision 2 has either already been achieved, or will be achieved within two scheduled plant refueling outages after May 1988, the effective date of Revision 2.

Dresden Units 2 and 3, Quad Cities Units 1 and 2

Revised PT curves, calculated in accordance with the February 1986 draft version of Regulatory Guide 1.99 Revision 2, are presently being reviewed for NRC submittal by March 31, 1989. These revised curves represent the status of the four units on a generic basis at 16 effective full power years (EFPY). The units are presently at approximately 10 EFPY. The revised curves utilize a +40 degree Fahrenheit (F) initial Reference Temperature, Nil Ductility Transition (RTNDT), which is the initial RTNDT for the most limiting material of all four units. The units can achieve the revised 16 EFPY minimum cold hydro temperatures with existing equipment. At this time, Commonwealth Edison is pursuing calculation of vessel-specific PT curves in accordance with the May 1988 version of Revision 2. If the revised curves (February 1986 draft) are found to be non-conservative to Revision 2 (May 1988), new curves will be submitted, and compliance with Revision 2 will be achieved within two scheduled plant refueling outages after May 1988.

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LaSalle Units 1 and 2

A Technical Specification revision is presently being reviewed for NRC submittal (by June 30, 1989), to incorporate PT curves which are in accordance with the May 1988 version of Regulatory Guide 1.99 Revision 2. The newly calculated minimum cold hydro temperatures at 32 EFPY are achievable for both units. However, an increase in the 200 degree F limit for cold shutdown during hydro testing will be pursued in the Technical Specification amendment request, to assure appropriate temperature margins are maintained.

Zion Units 1 and 2

Zion's current Technical Specification PT curves were calculated in accordance with the February 1986 draft version of Regulatory Guide 1.99 Revision 2. These curves have been determined to conservatively envelope the May 1988 Revision 2 requirements until 14 EFPY for both units. The units are presently at approximately 9 EFPY. No action is required at this time. However, operating flexibility will continue to be reduced as new PT curves are implemented in the future. Guidance currently being developed as part of the EPRI Reactor Vessel Embrittlement Management Program will be utilized to address actions which will be required as operating flexibility is reduced.

Byron Units 1 and 2, Braidwood Units 1 and 2

The current Technical Specification curves for all four units were calculated in accordance with Regulatory Guide 1.99 Revision 1, but have been determined to envelope the May 1988 Revision 2 requirements. The interval during which the individual unit PT curves remain conservative relative to Revision 2 is being evaluated. At this time, Byron Unit 2 is the most limiting unit, with existing PT curves remaining conservative for approximately another 1 EFPY. New curves will be submitted for Technical Specification incorporation within the interval during which the existing curves remain conservative.

If there are any questions on this response, please contact the Licensing Department at (312)-294-3962.

Respectfully

*Milton H. Richter*

M. H. Richter  
Nuclear Licensing Administrator

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cc: A. B. Davis  
Resident Inspectors - D/QC/LSC/Z/BY/BW

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