



**Commonwealth Edison**  
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October 11, 1989

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

Subject: Dresden Station Units 2 and 3  
 Quad Cities Station Units 1 and 2  
 Qualification of Mobil Greases for  
 Limatorque Actuators  
NRC Docket Nos. 50-237/249 and 50-254/265

- References (a): Letter from J.A. Silady to T.E. Murley dated March 9, 1989.
- (b): Letter from J.A. Silady to T.E. Murley dated October 31, 1988.
- (c): Wyle Report #17019-01, "Nuclear Environmental Qualification Test Program on Mobil Greases for Limatorque Actuators", dated September 15, 1989.
- (d): Sargent and Lundy (Component Qualification Division) Evaluation CQD-042827 dated September 29, 1989.
- (e): Sargent and Lundy Evaluation CQD-045164 dated September 29, 1989.

Dr. Murley:

As discussed with your staff during conference calls on August 7, and September 12, 1989, Wyle Laboratories has recently completed additional qualification testing of Mobil greases for Limatorque MOV actuators at Dresden and Quad Cities Stations. A preliminary report on the Wyle program was previously provided in Reference (a) which, at that stage of the accelerated aging and accident simulation, supported a qualified life of at least eight years of testing. In addition, previous testing by Mobil was discussed in Reference (b).

With the completion of the Wyle testing campaign, the results have been documented by Wyle in Reference (c) and evaluated by the Sargent and Lundy Component Qualification Division in Reference (d). The resulting qualified life (38.6 years) is based on the application of the "10°C rule" which was

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discussed on the recent conference calls. At your Staff's request, an additional evaluation has been prepared to technically support the use of the 10°C rule. This is provided in Reference (e) which is enclosed. The Reference (d) evaluation is also enclosed. In the copies of this transmittal provided to B.L. Siegel (NRR) and M.J. Kopp (Region III), Reference (c) is also attached as are a number of other documents cited by the Reference (e) evaluation. They are ordered and labeled by their Reference No. as listed in Section 6.0 (page 13) of the first enclosure.

Based on the enclosed and referenced material, CECO has concluded that:

- (a) The current maintenance and surveillance interval for these components (i.e. two cycles or approximately 3 years) is within the demonstrated lubrication capabilities of the Mobil greases for any likely service conditions based on testing and in-plant experience at CECO and elsewhere in the industry.
- (b) The large margin available to the qualified life of these greases provides additional protection for any unexpected conditions should they occur.

CECO, therefore, believes the existing inspections are adequate to assure that grease would be replaced before any degradation could affect the operability of safety-related Limitorque valves.

Please contact this office should further information be required.

Very truly yours,



J.A. Silady  
Nuclear Licensing Administrator

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Enclosures (2)

cc: A.B. Davis - Regional Administrator, RIII  
S.G. DuPont - Senior Resident Inspector, Dresden  
B.L. Siegel - Project Manager, NRR (w/17 Att's)  
M.J. Kopp - Engr. Branch, Region III (w/17 Att's)

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