March 10, 1976

Dr. Frank Price
General Electric Company
Capacitor Products Department
John Street
Hudson Falls, New York 12839

Dear Frank:

It was very valuable for us to be able to discuss the technical aspects of fluids to replace chlorinated diphenyl as impregnants for capacitors as we did last Thursday. We appreciated your hospitality and the information you shared with us.

Agreeing on specifications for MCS 1238 was a good accomplishment. Reviewing the performance data for MCS 1238 in capacitors as indicated by your life test data as well as by the test data we have obtained was also helpful.

We are most anxious to determine what has caused the dissipation factor increase you have observed during life test. The capacitors used and the conditions of test in both your work and ours are so similar as to make it hard to guess what has caused your capacitors to increase in dissipation factor while ours do not. We plan to try to determine what the critical difference is so it can be eliminated. The temperatures reached during test or the impregnation process seem to be the most likely difference.

During our discussion of the dissipation factor increase, Fred Graham indicated that we should not take notes on the data he was presenting because he would give us copies of the curves he showed on the screen. All of us forgot to see that this was done before we left. Would you please send them to us?

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We are also continuing our work to try to learn what it is about MCS 1588 that makes it have better corona inception and extinction voltages than MCS 1238.

Our investigation of the fact that film-paper capacitors show less increase in capacitance when impregnated with MCS 1238 than the same capacitors impregnated with Aroclor 1016 has given us some results which further clarify the cause of this phenomenon and may help us to cure it.

The ionol analysis at the 0.01% level is a different problem. We are continuing to work on it and will keep you informed on our progress.

Again, thanks for a good meeting and for supplying us with copies of Graham's curves.

Sincerely,

Ralph H. Munch
Distinguished Science Fellow
Functional Products R&D

RHM:kl

cc: Dr. R. E. Stenger, General Electric

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