

P. G. Benignus - B2SH

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Technical Sales Report
Askarels

P.J.A. MARSH - BRUSSELS
5040

H. S. Bergen - B2SA
J. G. Bryant - 1650
C. R. Coleman - 5470
J. R. Fallon - B2SH
T. L. Gossage - B2SL
R. H. Munch - 1760
W. R. Richard - T3A
J. R. Savage - B2NB

My traveling companion enroute Brussels indicated that by year end GE, Pittsfield expect to replace Aroclor 1260 with 1254. Pittsfield makes a good number of railroad transformers that require at least minus 38 C pour point. For this reason and because Pittsfield insist on having only one blend - they will not adopt the 65-35 blend used at Rome, (Pour pt. circa minus 33 C). A likely Pittsfield blend may use 55% or 50% 1254 thinned with TTCB - depending on absence of crystal formation at low temperatures.

GE, Pittsfield expect to purchase more Aroclor than in recent years. Due to PCB pollution they feel smaller transformer makers will not pursue askarel units as strongly as in the past. We already got this view at Moloney, Vantran, etc. Also due to pollution problems there is a coming surge for askarel pre-cipitor (rectifier) transformers. These units require more "know-how" than possessed by most of the smaller manufacturers.

GE's Washington, D.C. people indicated no chance of Rep. Ryan's bill coming up this year - it does not carry sufficient priority.

We discussed the historical background and significance of Doble's standard test procedures. GE runs these tests. Gas adsorption is the most outstanding feature of our alkylate. We would have to run the Perrelli test, routinely - and find a way to more effectively refine to stop acidity increase.

The following is given rather confidentially because it is in terms of cost - not selling price of the transformer. The mineral oil unit is 1.0, the askarel is 1.3 and dry type is 1.5, cost to make. Depending on rating the dry type transformers are failing at 125% to 140% of name plate loading KVA for 3 to 4 hours. If designed right the askarel and mineral oil transformers are holding up at much higher, 165% to 180%, over loadings. Particularly the Westinghouse cast-coil type dry units (greatly heralded) are now found to not hold up very well. All of this enhances the relative posture of askarel transformers as the tendency and need to overload is increasing. This is the point we had emphasized in our last ads on askarel transformers. "Why buy a dry-type - a big expensive fuse"? This hits the dry in the gut, while PCB pollution thwarts askarel.

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Raab related important organization changes at Rome as mentioned to me earlier by Jim Kinney. This is the reason Kinney told me that he is not enthusiastic about pressing his correct contention that we did not de-escalate the 3¢/lb. PCB pollution cost increase, in terms of the Rome formula. I told Jim that the PCB pollution cost increase has no favorites and our policy to be fair required us to increase the sale price of all our askarels, including all blends regardless of composition by 3¢/lb. If Jim elects to challenge our policy, he has been invited to St. Louis - otherwise we may well let this matter rest and follow the development at Pittsfield. Their problem will be to get a minus 38° C pour point and avoid crystal formation while attempting to employ maximum use of Aroclor 1254. With the reorganization it is likely that Raab will have much to say about what gets used at the different GE locations, including Canadian GE who use Pyranol A13B3B (Aroclor 1260). On replacing 1260 with 1254 Raab may seek to standardize on one Pyranol for all GE locations.

Mr. and Mrs. Vern Mulhall of Canadian GE had dinner with Raab, Colin Coleman and myself. Last week GE, Canada had asked for 5 gallons each of Aroclor 1016 and MCS 717. On the 1016, Canadian GE will follow Hudson Falls. Told Vern he should get in touch with Hudson Falls as they are ready to go in August. Canadian GE are actively in need of a low temperature Aroclor for capacitors to use in place of TCB blends. They have done considerable work in this regard with MCS 717, (isomerized Aroclor). They can cope with the lower DK if the pour point is low enough. Had to tell Vern that we do not foresee MCS 717 as a commercially feasible item, but Dr. Munch and I will be in touch with him on other candidates of more likely commercial stature for low temperature capacitors. Colin Coleman sampled the Russians and others with MCS 717, but developed no interest.

Colin also mentioned that in Sweden all Aroclor (PCB) is banned from ballast and motor-run capacitors. PCB is now allowed only in power capacitors and transformers, with feeling that these uses are confined to responsible hands.

Coleman also mentioned that Josh Reynolds at BICC has been studying a number of esters, but found them lacking some of the attributes of castor oil. Will pick up more information about these various things when I have chance to visit the European capacitor makers.

However, we rely on Colin to continuously give us feedback about possible Aroclor replacement developments in Europe. In Germany we do not have contacts with the capacitor industry and for this reason do not have understanding about the status of Siemens MKV capacitor design, about which GE is asking us. Will ask Dr. Knust of Bayer about this at our IEC meeting. Can also probably get input from P. Jay of Prodelec.

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I invited Coleman to spend two months working in St. Louis with Dr. Ralph Munch. However, with acquisition of several new dielectric accounts in the European marketing area Coleman is loaded with questions and work and cannot absent himself. Additionally since some reorganization Coleman in research has extra responsibility for process research. In any event I asked Colin to telephone Dr. Munch every few months. Colin is reasonably satisfied, doing his best to tend to our expanded business, in the face of budget cuts, and now needs to introduce new products such as "scavengers" in southern Europe and low-temp dielectrics and DC additive blends in Russia, and Aroclor 1016, etc.

Today at our IEC-10 meeting I asked Mr. Jay of Prodelec about the status of Superad (6% Unox 4-206 in Aroclor 1242). He said that Prodelec has discontinued Superad because the Unox 4-206 was too hard to control, especially where the users degass the fluid. We never were pleased with Unox 4-206 and in fact have been wise to largely avoid it. Hopefully it is now put to rest in around the world circles and can be confined within the walls of GE. As replacement for Superad, Prodelec has selected an additive not covered by GE patents, which brings to mind all the trouble bestowed on us by Superad at Plessey-Ducon in Australia. In interest of our ROW markets, Monsanto should now select an epoxide additive of our own.

Salazar of ANSI will attend our IEC-10 discussions on PCB pollution.

Had dinner with Gen. Mgr. & Tech. Dir. and wives of Nokia-Finland. Making GE Magvar series capacitors - results are good.

However, Mike Scoville is going to Liljeholmens Sweden who are in trouble with high power factor with GE's Magvar design.

Scoville is going to Japan, mid-August and invited me to join him. Nissin have been making Magvar units for three years and their units continue to fail in the field - high power factor. Japanese utilities refuse to buy and stay with paper - Aroclor (tank type) capacitors. No wonder that Nissin are afraid to try MMK Aroclor.

Scoville visited Ia Celophane. Now making very thin 0.35 mil PPL film - very wide - 7 meters.

The Russians who have two Aroclor producing plants have need for 5,000 tons per year of Aroclor for power capacitor banks - their market is large, perhaps even larger than ours.

China will probably need considerable Aroclor for capacitors.

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