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POLYMER PRODUCTS DEPARTMENT
CHESTNUT RUN

Richard C. Wilson
U. S. Nuclear Regulatory Commission
1 Whiteflint North - 9D4
Washington, DC 20555

Dear Dick:

I would like to thank you for your recent telephone call. It was very interesting to hear your comments on the use of KAPTON polyimide film as an insulating material within the nuclear electric utility industry.

During our conversation, you had requested further information concerning the issue of hydrolysis as raised in the report of F. J. Campbell (IEEE Trans., vol EI-20, no , pp 111-116, 1985). I am enclosing a copy of the paper, "Why Long-term Performance Exceeds Some Limited Laboratory Projections" by J. O. Punderson and J. F. Heacock. This work offers some further discussion of the effects which humidity and temperature can have on polyimides.

At your request, I have also enclosed the following KAPTON polyimide film literature:

Summary of Properties
Safety in Handling and Use
Taping of Wire Insulation
Tape Width and Taping Angle Guide Charts
Heat Sealing Wire Insulation
Radiation Resistance

Explicit data on the effect of aqueous sodium chloride solutions upon electrical properties of wiring insulated with KAPTON is not available.

Once again, thanks for your interest. Because of our discussion, I now have a much more accurate perspective on your needs and concerns. Please call me at 302-999-5936 if I can be of any further assistance.

Best regards,

L. William Buxton
Technical Specialist

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Enclosures

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