Development of PAN-based Calibration Materials for Use in Calibrating Burnthrough Equipment

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Abstract. This presentation identifies the need for consistent, repeatable materials that can be used as tools to help ensure the new burnthrough test equipment is calibrated properly and performing acceptably. Polyacrylonitrile (PAN) materials have been utilized for the past several years as calibration aids during comparison testing of this equipment. PAN materials can be produced in a variety of thicknesses, and are capable of being manufactured to purposely fail in a prescribed timeframe, which is beneficial when conducting comparison tests between various laboratories. Recent advancements in materials manufacturing processes have led to the development of very consistent materials with precise failure modes designed to accurately assess burner performance.