

ASTM D27 Liaison Report  
IEEE Transformers Committee Meeting  
Columbus, Ohio  
Monday, October 28, 2019

Thomas Prevost

ASTM Committee D27 on Electrical Insulating Liquids and Gases was formed in 1959. D27 meets twice each year, in November and May, with about 30 members participating in 12 meetings over two days. The Committee, with a membership of approximately 90 members, currently has jurisdiction of over 60 approved standards that are published in the Annual Book of ASTM Standards, Volume 10.03

**Committee Scope:** The promotion of knowledge pertaining to electrical insulating liquids and gases, whether of synthetic or natural origin, and the recommendation of standards pertinent to these materials. The principal materials included in this scope are oils of petroleum origin, synthetic liquids, halogenated and other gases, when used, singularly or as combinations, as electrical insulation or as an environment for electrical insulation.

Standards peculiar to solid insulating materials and varnishes and the development of standards pertaining to the nonelectrical uses of liquid and gaseous materials are excluded from the scope of Committee D27. Development in these fields incidental to the normal work of Committee D27 will be coordinated with the appropriate technical committees of the Society.

**Committee Officers:**

Chairman: Janet V. Lloyd  
Vice-chairman: Lance R. Lewand  
Secretary: Edward W. Casserly  
Staff manager: Kelly Paul  
Admin assistant: Marianne McKeever  
Editor: Christine Leinweber

**Subcommittees:**

D27.01 Mineral  
D27.02 Gases and Non-Mineral Oil Liquids  
D27.03 Analytical Tests  
D27.05 Electrical Test  
D27.06 Chemical Test  
D27.07 Physical Test  
D27.15 Planning Resource and Development  
D27.90 Executive  
D27.91 I.E.C. TC 10 and Advisory  
D27.95 Awards, Special Events, and Bylaws.

**Hot Topics:**

**D27.01 - Mineral Oils, Jimmy Rasco:**

- The new standard specification for rerefined mineral insulating oil (WK31231) will be re-ballotted at both sub-committee and main committee.
- The revision of D117 “Standard Guide for Sampling, Test Methods, and Specifications for Electrical Insulating Oils of Petroleum Origin” (WK51721) will be re-ballotted at both sub-committee and main committee.

**D27.02 - Gases and Non-Mineral Oil Liquids, Denis Lafrance:**

- The new standard specification for synthetic esters (WK46195) will be re-ballotted at both sub-committee and main committee.
- Standard specification for Natural (Vegetable oil) Ester Fluids Used in Electrical Apparatus will be re-opened to incorporate changes which were not included in the re-instatement of the standard.

**D27.03 - Analytical Tests, Claude Beauchemin:**

- The reapproval of D4059 Standard Test Method for Analysis of Polychlorinated Biphenyls in Insulating Liquids by Gas Chromatography was approved.
- The reapproval of D6802 Test Method for Determination of the Relative Content of Dissolved Decay Materials in Mineral Insulating Oils by Spectrophotometry has a persuasive negative. The item will be allowed to be withdrawn at the end of 2019.

**D27.05 - Electrical Tests, Sandra Smith:**

- D1169 – Standard Test Method for Specific Resistance (Resistivity) of Electrical Insulating Liquids was approved.

**D27.06 - Chemical Tests, Lance Lewand:**

- Withdrawal with no replacement of D1934 - Standard Test Method for Oxidative Aging of Electrical Insulation Petroleum Oils by Open-Beaker Method.

**D27.15 - Planning, Resources and Development, Kevin Rapp:**

**D27.91 - IEC TC 10 Advisory, Kevin Rapp:**

Kevin Rapp presented the IEC TC 10 Advisory report.

**D27.95 - Awards, Special Events, Bylaws, Clair Claiborne:**

**Future Meetings:**

Nov 3 – 5, 2019; Marriott Marquis; Houston, TX

May 10-12, 2020; Boston Marriott Copley Place; Boston MA