



**IEEE Vehicular Technology Society
Philadelphia Chapter**



April 19, 2022 Joint Meeting Announcement

Topic: “Powerless” – A History of Our Nation’s Major Power Blackouts and Description of Its Grid

Sponsors: IEEE Vehicular Technology Society (VTS) Philadelphia Chapter *and* the Philadelphia Section

Speakers: Bob Swayne, P.E., IEEE Senior Life Member

Meeting date/time: Tuesday, April 19, 2022, 7:00 pm to 8:00 pm (Eastern Standard Time)

Location: *Virtual meeting* link posted on IEEE vTools prior to the meeting.

Cost of meeting: There is no charge for meeting attendance.

Reservations: *Attendees are required to register at:* <https://events.vtools.ieee.org/m/310555>

A valid email address must be provided in order to receive the link for the meeting. If you have any questions, please contact Brandon Swartley at brandon.swartley@ieee.org.

Professional Development Hours: Attendees may apply for 1.0 PDH provided through the IEEE Certificates Program, accepted in all states. Send \$5.00 (USD) payment to Brandon Swartley via Zelle at brandon.swartley@ieee.org and complete online evaluation at <https://r2.ieee.org/philadelphia-vts/forms/>
Evaluation form must be completed and payment received within one week to receive PDH certificate.

Abstract: In November 1965, the United States suffered its first major loss of electrical power, The Great Northeast Blackout of 1965. 30 million people were left in the dark, including all New York City. New York City again went dark in 1977, and again, 2004, in the largest blackout to hit the United States. Cities and states across the country have been affected at one time or another. This presentation will cover the history of major blackouts, their causes, impact and aftermath. The presentation will also describe the nation’s power grid with its three separate systems, transmission voltage levels, AC versus DC transmission, and who watches over this nation-wide grid which we all depend on 24/7. In addition, it’s been over a year since the collapse of Texas power system. Some called this catastrophe one of the worst blackouts in the nation’s history in terms of impact to those affected. We will look at just how close the grid was to total collapse and what has and has NOT been done to prevent another power disaster.

Speakers: Bob Swayne retired in 2017 after an electrical engineering and consulting career for industrial and commercial facilities. He is a graduate of Drexel University with BS and MS in Electrical Power Engineering and a licensed professional engineer in Pennsylvania. Bob served IEEE local and national societies including the Philadelphia Power & Energy - Industry Applications Joint Chapter, National Electrical Code panels, and IEEE standards committees. He was 2013 Delaware Valley IEEE Electrical Engineer of the Year and now a Senior Life IEEE member.

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