



POWER & ENERGY SOCIETY  
INDUSTRY APPLICATIONS SOCIETY  
VEHICULAR TECHNOLOGY SOCIETY  
NEW YORK SECTION



You are invited to a meeting of the  
PES & IAS NY Chapter and NY VTS Chapter  
**Grounding for Rail Signal Systems**  
**Tuesday, April 23, 2019**

**THE PRESENTATION:**

Transit Signal use ungrounded energies to detect position of trains using vital circuit design. The track circuit for this could be 300feet to couple of miles, so the exact position, direction and speed of train is unknown. This is inefficient use of real estate especially if 30 or more trains per hour have to operate. To improve throughput CBTC (communication based train controls) is being deployed which also meets FTA/FRA PTC requirements. However CBTC uses 3V or 12V redundant design of computers and network switches which require Zero Reference Ground (ZRG). How do you achieve ZRG in transit with leaking DC currents?

**THE SPEAKER: VIJAY LALCHANDANI, SYSTRA**

Mr. Lalchandani is a Senior Electrical Engineer at Systra in New York City. He has over 30 years of experience in managing large scale projects at NYCT. After joining Systra in 2018, he has since worked on projects for various authorities such as WMATA, CTA, PATH, and LIRR. Mr. Lalchandani is a NY Licensed P.E. with a B.S. in Electrical Engineering.

**ALL ARE INVITED – PLEASE POST**

RSVP: <https://meetings.vtools.ieee.org/m/197142>  
**Chair Programs: Arnold Wong**  
[wongar@coned.com](mailto:wongar@coned.com) or (212) 460-4189  
**Chair Technical Committee: Sukumar Alampur, PE**  
[salampur100@hotmail.com](mailto:salampur100@hotmail.com) or (917) 522-2844  
**VTS Registration, Muamer Dedovic**  
[muamer.dedovic.us@ieee.org](mailto:muamer.dedovic.us@ieee.org)

**When:** 5:00 pm — Starts-Refreshments & Program  
7:00 pm — Program Ends  
**Where:** Con Edison  
Edison Room, 19<sup>th</sup> Floor  
4 Irving Place, New York, NY 10003  
Nearest Subway: 14<sup>th</sup> St/Union Sq.

**FOR SECURITY REASONS: NO WALK-INS!**

**This program will be awarded Continuing Education Units.**

