

# HARMONIC CHALLENGES FOR DISTRIBUTION GRID DESIGN



**MARCH 7, 2024 – 1:00PM TO 4:30PM EST**

## **Tutorial: Harmonic Challenges for Distribution Grid Design**

This 3.5-hour tutorial will cover the applicational challenges of harmonic mitigation and design/specificational “best practices” for assuring proper load structure for power quality.

As new technologies for load-based structures transition to modern diode bridge and IGBT-based rectification configurations, electrical harmonics become a key consideration in planning for distribution grid design and load structure power quality specification. This course will provide information on:

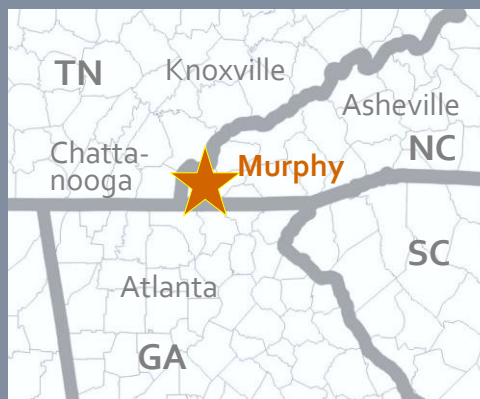
- \* The Fundamentals of Electrical Harmonics
- \* Review of IEEE 519-2022 Requirements + Considerations of Missing Frequency Bandwidths in Standards (3kHz–150kHz)
- \* Harmonic Mitigation Strategies
- \* Considerations for Power Quality & Conditioning in Utility-Tied Systems

## **Modeling Exercise Case Study**

For learners who wish to try a practical application of the information from the tutorial, this 30-minute modeling exercise will be a value-added opportunity! Facilitated Q&A to follow.

## EVENT LOCATION

Aegis Power Systems, Inc  
805 Greenlawn Cemetery Rd.  
Murphy, NC 28906



## TRAVEL INFO

Traveling from out of town?  
See page 2 for travel details!

## VIRTUAL ATTENDANCE

Optionally available as a virtual event. Obtain information via registration link.

**REGISTRATION: <https://events.vtools.ieee.org/m/401106>**

**FEE: \$95 Non-IEEE Members / \$25 IEEE Members / \$10 IEEE Student Members**

# TRAVEL INFO FOR ATTENDEES

## POST-EVENT SOCIAL:

*Stay tuned for more details on an IEEE social networking opportunity at 5:30pm same day in historic downtown Murphy, NC.*

**ADDRESS:** 805 Greenlawn Cemetery Rd.  
Murphy, NC 28906

**FLIGHTS:** Nearest airports include Atlanta GA, Chattanooga TN, and Asheville NC

*(Must plan for 2-2.5 hours driving from any of these airport locations.)*

**HOTEL:** [Holiday Inn](#), Murphy NC

*Please book by March 4, 2024 using code "AEGIS POWER" to obtain special **\$109** price for March 7 stay. Please call (828) 837-1111 to reserve.*

## HOSTS:

