

2017 NDAREC WEBINARS

FOR ENGINEERING AND OPERATIONS

This stand-alone webinar series includes four webinars. Each webinar will consist of one hour of instruction and a 30-minute question-and-answer session. All webinars will begin at 10 a.m. Central Time. Most presentations will be in Power Point format with handouts in pdf format.

JUNE 6 – MOTOR STARTING ANALYSIS

Mitigation of power quality issues due to motor starting on the power system can be one of the most difficult challenges faced by electric utility personnel. This presentation discusses how to prepare a motor starting analysis for various types of motor starters. The impact of the various motor starters on the starting current and starting torque will also be discussed as well as mitigation techniques.

KEY TOPICS:

- Preparing a motor starting analysis
- Assessing the impact of various types of motor starters
- Mitigation techniques for common motor starting issues

JULY 11 – SOLAR DESIGN

Solar systems are being installed by residential utility customers, which will be operated in parallel with the utility system. It is important to have an understanding of the electrical design of these systems. The goal of the webinar is not to teach how to design a solar system, but to understand the concepts and National Electric Code articles that pertain to the solar systems. This webinar specifically addresses AC/DC inverter requirements, sizing both AC and DC conductors, voltage drop limitations, grounding requirements, interconnection requirements and overcurrent protection methods.

KEY TOPICS:

- Understanding the inverter requirements
- Conductor capacity and voltage drop limitations
- Grounding requirements
- Overcurrent protection
- Interconnection requirements

AUGUST 8 – DISTRIBUTED GENERATION INTERCONNECTION

More roof top solar and commercial solar are being installed by consumers to defray their energy bills. The presentation provides a detailed review and application of IEEE Standard 1547 for interconnection of solar systems as well as other types of prime movers. The discussion will include screening techniques to help speed the process, as well as how to analyze new DG units from 5 watts to 3MW.

KEY TOPICS:

- Review and application of IEEE Standard 1547
- Screening techniques
- Analysis of DG Units from 5 watts to 3 MW

SEPTEMBER 12 – TECHNIQUES FOR REDUCING SYSTEM LOSSES

System losses can range from 4 percent to 10 percent of total system energy purchases. Reducing these losses will result in bottom line improvement of the financial success of an electric utility. This presentation will cover the cause of losses both at peak (kW) and over time (kWH), as well as accounting for unmetered sales. A benchmarking methodology will be provided to compare your system losses to similar electric systems. The webinar will present mitigation techniques to address loss reduction.

KEY TOPICS:

- The cause of system losses
- Benchmarking losses against other systems
- Mitigation techniques

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