

# Nashville (Franklin), TN Logistics Information

# Hardware Installation and Troubleshooting (4-Day Factory Training) 3000PMUHW250

# Classroom (In-Person) Hours

- Mon-Wed 8 AM 4 PM CT, Thurs 8 AM -1:30 PM CT
- Please arrive no later than 7:45 AM each morning to allow time for check-in and daily health screening
- For the first day of in-classroom training, attendees will be required to complete the daily health screen and receive their Schneider Electric provided surgical mask at the Daily Screening location on the 1<sup>st</sup> floor (following the lobby signage; see wayfinding map on page 3) then proceed to the 7<sup>th</sup>-floor reception desk for badging and sign-in. (Please see the Schneider Electric Visitor Health Protocols section below).
- Please book departing flights at least 2 hours after the end time of the last day of class.

# Power Management University will provide a boxed lunch for each day of training.

 Meals should not be eaten in training room. We encourage you to enjoy your meal in Schneider Electric's open lobby or outdoor amphitheater.

# Schneider Electric Visitor Health Protocols

In light of the current outbreak of COVID-19 (Novel Coronavirus), Schneider Electric is taking extra precautions to protect the health and well-being of customers, partners, vendors, employees, and guests at our facilities.



Out of an abundance of caution, we are allowing only business-critical visitors to enter the facility. To minimize possible exposure and risk, all visitors must comply with our safety protocol.

Please note that upon entering the facility each day, all visitors will be required to do the following:

- Pass a daily temperature screening
- Wear a Schneider Electric provided surgical mask \*

\* Based on the most recent direction from the CDC, Schneider Electric will now require that all employees, customers, visitors, and contractors wear a mask and practice social distancing within our facilities (whether vaccinated or not). Only Schneider provided masks are allowed in Schneider facilities.

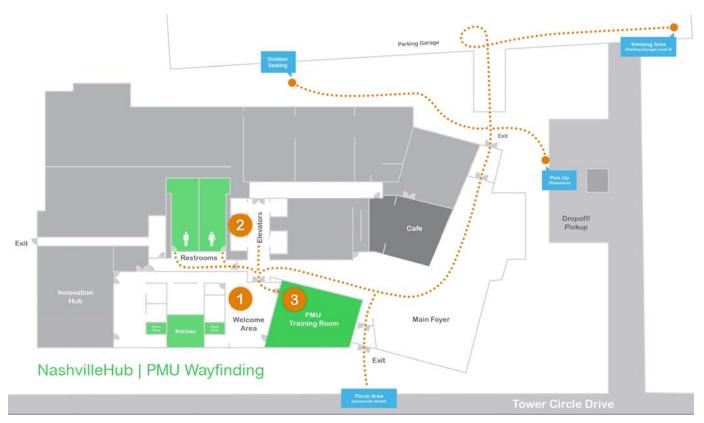
Visitors that trigger the risk criteria will not be permitted to attend the training.

We appreciate your cooperation and understanding in helping keep our visitors and employees healthy.

# Franklin, TN Logistics

- Location Franklin Office, Two Franklin Park. 6700 Tower Circle, Franklin, TN 37067
- Email powerlogic.university@se.com
- The Schneider Electric facility is approximately 45 minutes south of Nashville International Airport (BNA) and approximately 20 minutes south of downtown Nashville.
- When entering Franklin Park from McEwen, the Two Franklin Park building is on the left. There
  is plenty of free parking in our covered parking garage, which is attached to the Schneider
  Electric facility. Parking for those with disabilities is available.
  - o For day one of training, **(Step 1)** please proceed to the health screening station (following the lobby signage; see first wayfinding map on page 3) where you will receive your Schneider provided surgical mask, then **(Step 2)** please take the elevators up to the 7<sup>th</sup> floor and check in with the Concierge Desk to receive your badge, just outside the elevator lobby (see second wayfinding map on page 3).
  - After completing check-in and receiving your badge from Concierge, (Step 3) please return to PMU on the 1st Floor, behind the double glass doors in Suite 120, in Room 1000E (see first wayfinding map on page 3).









## **Recommended Area Hotels**

Contact hotels directly to inquire about any available Schneider Electric corporate rates that might be available during your stay.

### Drury Plaza Hotel - Franklin, TN (within .5 miles of Schneider facility)

- 1874 W McEwen Dr., Franklin, TN 37067 (615) 771-6778
   Schneider Electric 2021 Corporate Rates: Starting at \$115/night for standard rooms
- The Drury Plaza's amenities include free hot breakfast every morning and free hot & cold beverages/cocktails every evening at their 5:30 Kickback.
   Click here for more amenity details

### Homewood Suites - Franklin, TN (Next door to the Schneider facility)

2225 E McEwen Dr., Franklin, TN 37067 (615) 465-0400
 Schneider Electric 2021 Corporate Rates: Starting at \$126/night for standard rooms

## Aloft Hotel - Franklin, TN (about 2.5 miles from the Schneider facility)

7109 South Springs Dr., Franklin, TN 37067 (615) 435-8700
 Schneider Electric 2021 Corporate Rates: Starting at \$118/night for standard rooms

## Holiday Inn - Brentwood, TN (about 2.6 miles from the Schneider facility)

1738 Carothers Parkway, Brentwood, TN 37027 (615) 277-8700
 Schneider Electric 2021 Corporate Rates: Starting at \$114/night for standard rooms

## **Embassy Suites** - Franklin, TN (about 1.5 miles from the Schneider facility)

820 Crescent Centre Drive, Franklin, TN 37067 (615) 515-5151
 Schneider Electric 2021 Corporate Rates: Starting at \$123/night for standard rooms

<u>Courtyard by Marriott</u> - Franklin, TN (about 1.7 miles from the Schneider facility)



2001 Meridian Blvd., Franklin, TN 37067 (615) 778-0080
 Schneider Electric 2021 Corporate Rates: Starting at \$110/night for standard rooms

**Hyatt Place** - Franklin, TN (about 2.7 miles from the Schneider facility)

650 Bakers Bridge Avenue, Franklin, TN 37067 (615) 771-8900
 Schneider Electric 2021 Corporate Rates: Starting at \$95/night for standard rooms

<u>TownePlace Suites</u> - Franklin, TN (about 2.6 miles from the Schneider facility)

7153 South Springs Drive, Franklin, TN 37067 (615) 861-1111
 Schneider Electric 2021 Corporate Rates: Starting at \$99/night for standard rooms

## **COURSE DESCRIPTION**

# Hardware Installation & Troubleshooting

## **Overview**

This 4-day course focuses on installation and setup of PowerLogic and ION metering. Participants will identify and resolve meter setup issues, CT and PT wiring issues, and meter communication network issues. Participants will examine the capabilities of specific PowerLogic and ION meters and learn how to select the correct meter for different metering points in a facility. Participants will explore the features of PowerLogic communication gateways and practice setup and configuration. The ION Setup Utility will be used to display real-time data tables for the purpose of verifying that meter CTs and PTs are correctly wired to the meters. The ION Setup Utility will also be used to setup logging and event detection for each meter in the system. Participants will also create and manage a basic system in StruxureWare Power Monitoring Expert. This course provides an introduction to installing and setting up a metering system utilizing PowerLogic and ION hardware.

## **Duration**

4 Days (M-W 8am-4pm / Th 8am-1:30pm). Please book departing flights for 4pm or later on the last day of class.

## Who should attend

Anyone who will be designing, installing, configuring, troubleshooting or maintaining PowerLogic and ION metering and communication devices.

# **Prerequisites**

- □ Basic computer skills and experience with Microsoft Windows.
- Working knowledge and understanding of electrical terminology, concepts and calculations, including an understanding of the relationships among current, voltage, power and power factor in three-phase circuits.



## Students will be able to

- Understand basic power fundamentals and terminology
- Determine the capabilities of specific PowerLogic and ION metering devices
- □ Use the PowerLogic and ION meter front panels
- □ Use the ION Setup Utility to troubleshoot CT and PT wiring issues
- □ Use the ION Setup Utility to modify and save meter configurations
- ☐ Explain how to correctly mount and wire PowerLogic and ION meters
- □ Upgrade the firmware of PowerLogic meters and ION meters
- □ Troubleshoot meter wiring and communication issues
- □ Configure PowerLogic gateways for device communications
- □ Add PowerLogic and ION meters into a StruxureWare system
- □ Create a simple power monitoring system in StruxureWare Power Monitoring Expert
- ☐ Generate a Vista diagram and create basic Vista objects

# **Agenda**

# Day 1

#### **Course Introduction**

- Student and Instructor introductions and overview of course logistics
- Overview of course topics and agenda

#### **Review Power Fundamentals and Power Quality**

- Understand power fundamentals topics and the variety of quantities that can be measured
- □ Review key components of power quality

#### Introduction to PowerLogic and ION meters

- Overview of PowerLogic and ION meters
- □ Describe meter placement in systems
- □ Review of communication devices (gateways)
- □ Identify meter volts mode and wiring configurations

#### Familiarize and use meter front panels

- □ Navigate the display screens to view meter information
- □ Access the front panel setup menus to configure meter settings

# Day 2

#### Introduction to ION Setup

- □ Understand the features and uses of ION Setup for meter configuration
- Practice connecting to both PowerLogic and ION meters

#### CT & PT wiring

- Recognize proper meter readings based on wiring
- □ Understand three and four wire systems and associated phasor diagrams
- Practice troubleshooting and correcting meter wiring issues

#### ION Setup data validation and time synchronization

- □ Display real time data from a meter using ION Setup software
- □ Configure time synchronization in PowerLogic and/or ION meters

# Day 3

#### Communications between metering, gateways, and software

- □ Define a communications model
- □ Review physical elements of communications networks
- □ Examine serial networks and associated configuration parameters

#### Logging and alarming configuration

- Discuss meter logging quantities
- □ Review standard alarm lists and set-points

#### **Troubleshooting Labs**

- □ Demonstrate setting up a physical serial communication network (meter to gateway)
- □ Validate proper communications between devices
- □ Troubleshoot serial communications

# Day 4

#### **Troubleshooting review**

- Discuss troubleshooting techniques
- Review communications networks.

#### **Introduction to Power Monitoring Expert (PME)**

□ Understand the products and tools within PME and how they can be used

#### Modify and add meters to PME through Management Console

- Maintaining your system using Management Console
- □ Determine communications details for newly installed meter
- □ Add new meters in PME
- □ Verify communications of newly installed meters

#### Modify and create diagrams using the Vista tool

- Understand the objects in the Vista Toolbar
- □ Create basic screens with values, statuses, and other Toolbar objects

#### **Course Summary**

- ☐ Answer any remaining questions
- Outline available resources for education going forward