## **COURSE DESCRIPTION**

# **EcoStruxure Power Monitoring Expert (PME) Operation**

#### **Overview**

This 4-day overview course focuses on the what, how and why to use an EcoStruxure Power Monitoring Expert system. Students will be exposed to power monitoring fundamentals in order to set a baseline for class. Students will practice using PowerLogic and ION meter front panels to verify the configuration of devices that already exist in the system. In a hands-on lab environment, students will use the Web Applications offered in PME to extract and analyze the data coming from connected devices. Students will learn how to quickly examine data from their system using tools like Dashboards, Reports, Trends, Alarms, and Diagrams. The course then moves on with an overview of one of the engineering client tools, Management Console, to ensure the attendees understand how to add new devices to the PME system. The course concludes with a round-robin session to ensure that students "take away" one tangible item they will do when they get back to their location and their PME system.

## **Duration**

4 Days (Monday - Thursday). Daily hours may vary, depending on Classroom vs. Remote delivery.

## Who should attend

Anyone who will be/is using PME or migrating from our SMS platform or ION platforms.

# **Prerequisites**

- Basic computer skills and experience with Microsoft Windows
- □ Basic metering terminology

## Students will be able to

- Understand basic power fundamentals and terminology
- □ Verify the configuration of meters in a PME system



- Analyze historical loads and consumption using Diagrams
- □ Manage events and alarms in new Incident Alarm Viewer web tool
- □ Analyze power quality and waveform data in the new Waveform viewer
- Create, manage, and automate reports with Web Reporter
- Create and manage Trends in Trends web tool
- Create and manage Dashboard web tool

## **Agenda**

## Day 1

#### **Course Introduction**

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

#### **Review Power Fundamentals**

 Understand the power fundamentals topics and the variety of quantities that can be measured

#### Intro to ION/Powerlogic Devices

- □ Overview of ION hardware
- □ Overview of Powerlogic hardware
- □ Review of hardware placement in systems
- □ Overview of hardware clocks, synchronization and settings

#### Familiarize and Use meter front panels

- $\hfill\square$  Navigate the display screens to view meter information (in-person class delivery format)
- Access the front panel setup menus to configure meter settings (in-person class delivery format)

### Day 2

#### Understand the key features of a PME system

- □ Understand all component of PME system and why they are used:
- □ Introduce Dashboards tool
- □ Introduce Reports tool
- □ Introduce Alarms tool
- □ Introduce Diagrams tool
- □ Review Engineering client tools
- □ Review communication capabilities

#### **Dashboards**

- □ Review of the Dashboards Tool
- Understand navigation of Dashboards tool
- □ Creation of gadgets within Dashboards tool
- □ Creation of automated slideshows

#### Reports

- □ Review Reports library
- ☐ Generate a "Trend" report
- ☐ Generate a "Load Profile" report
- ☐ Generate an "Energy Cost" report
- ☐ Generate a "Power Quality" report
- □ Configure automated report Subscriptions

#### **Trends**

- □ Review existing trends and understand their capabilities
- □ Create new trends
- □ Utilize target lines and thresholds to enhance the visualization of data

## Day 3

#### **Introduction and Overview of Alarm Optimization**

- □ Understand Alarming problems in control systems
- □ Identify steps to resolve and maintain alarm systems
- □ Create a plan to correct/improve alarm functionality within your system

#### **Alarms**

- □ Understand the features and benefits of the Alarm tool
  - o Power Event Analysis
  - o Incident grouping
  - o Timeline Analysis
- □ Understand the different types of alarms
- ☐ Manage alarms within the Alarms tool

#### **Diagrams**

- □ Review Diagrams library
- □ Explore the default diagrams for natively supported devices
- □ Discuss use cases for building custom diagrams

## Day 4

#### Review of PME client types and communication design

- □ Overview of the different client types in PME systems
- □ Overview of communication designs and system integration

#### Modify and add meters to PME through Management Console / Device Manager

- □ Add devices to the system using Management Console
- Add devices to the system using the web-based Device Manager
- □ Determine communication details for newly installed meter
- □ Verify communications of newly installed meters

#### Review and "Takeaways"

- □ Student round robin to declare what is next for them.
  - Based on all that has been covered, Students to provide ONE thing they will do with / to the PME system when they get back "home" A "take-away".
- □ Evaluation of Class and instructor(s)