Technical Training Catalog
moving faster into the future

Landis+Gyr

manage energy better

WELCOME

Training is essential to ensure the customer's success in implementing the Smart Grid Solution. Our goal at Landis+Gyr is to provide a foundation of knowledge that will allow personnel to quickly and accurately understand how the system functions and to take full advantage of the information that is provided. Modular, process-based training allows employees from all areas within the utility to understand their role in the Smart Grid system and be able to integrate the system into their daily processes.

Initial agreements with Landis+Gyr generally include a training package. The package may include classroom training, WebEx training or a combination of both. Utilities may choose to purchase credits towards future training needs. Utilities that elect to purchase a Support Agreement receive 16 credits to be used towards future WebEx training.

To view the upcoming WebEx sessions, and register for a session:
https://attendee.gototraining.com/371vl/catalog/1841102894663283456?tz=America/Chicago

To view the training calendar, and to register for a class: https://www.landisgyr.com/devices/training-americas/

RF MESH CLASSROOM TRAINING

RF Mesh Command Center Introduction

Pre-requisites: None

Class Length: 3 Days **Credits:** 24 **Fee:** $1200

Command Center is the browser-based operating software for RF and PLC networks. It provides a secure platform for data and system management throughout the utility. In this session, participants will be introduced to basic and intermediate features of the Command Center software for use in the Smart Grid solution. Students will perform normal day-to-day functions including deploying meters, changing out meters, maintaining the system and troubleshooting.

Audience: AMI System Administrator and other utility personnel that need to understand all aspects of the RF Mesh Solution.

- RF Mesh Solution Overview
- Deploying Collectors and Routers
- Managing Endpoints and Routers
- Billing and Customer Service
- Setting Up Command Center
- Meter Deployment
- Daily System Monitoring

RF Mesh Network Deployment

Pre-requisites: None

Class Length: 3 Days **Credits:** 24 **Fee:** $1200

The RF Mesh network connects electric, water and gas meters, distribution devices and home area network devices under a single communication network. This session covers the fundamentals of the RF Mesh network, site survey processes, installation and configuration of collectors and routers. In addition, students will be introduced to RadioShop and Endpoint Testing Manager software as tools used to work with the hardware devices in the network.

Audience: AMI System Administrator the Network Administrator, RF Field Technicians, Metering personnel and other personnel who may be responsible for the installation of network hardware equipment.

- Overview of the RF Mesh Solution
- Collector Installation
- Endpoint Testing Manager
- Site Surveys
- Router Installation
- RadioShop

RF Mesh Advanced Network Troubleshooting.

Pre-requisites: RF Mesh Command Center Introduction, RadioShop, Endpoint Testing Manager

Class Length: 3 Days **Credits:** 24 **Fee:** $1200

Command Center and RadioShop provide a variety of reports for troubleshooting and maintaining the RF Mesh Network. In this session, participants will learn how to troubleshoot the various components of the RF Mesh Network using both software tools.

Audience: AMI System Administrator, Network Administrator, and other utility personnel that will be involved in troubleshooting the RF Mesh system.

- RF Mesh System Overview
- Troubleshooting Routers
- Troubleshooting Collectors
- Troubleshooting Meters

RF Mesh Command Center Online Training

RF Mesh Solution Overview

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

Landis+Gyr RF Mesh Solution is a comprehensive wireless data communications solution that uses spread-spectrum radios in the 902 - 928 MHz area of the radio spectrum to provide reliable network answers for remote telemetry. In this session, participants will become familiar with the RF Mesh solution, including understanding the RF Mesh theory of operations, fundamental elements of the network, and network routing.

Audience: AMI System Administrator, Network Administrator, Security Administrator and all individuals at the utility wishing a general understanding of the RF Mesh Solution.

- RF Mesh Solution Overview
- Mesh Network Routing
- Elements of the RF Solution
- Security Overview

RF Mesh Command Center Setup & Management

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

User access, global settings and rules are established by the utility upon initial installation of Command Center. In this session, participants will learn how to setup Command Center for initial use, as well as on-going processes and maintenance tasks.

Audience: AMI System Administrator, Security Administrator, Network Administrator and decision makers in other departments within the utility

- Command Center Overview
- Create User Roles
- Validation Groups
- Understanding Command Center Licenses
- Set-up and Administer Users
- Importing Firmware and DCWs

RF Mesh Command Center Deploying Collectors and Routers

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

The Collector provides the communication interface between the mesh network and Command Center. Collectors should be the first equipment installed, followed by the routers to provide the Initial components of the layered network. In this session, participants will learn the steps necessary to configure collectors and deploy routers using the Command Center software.

Audience: AMI System Administrator, Network Administrator and IT personnel.

- RF Collector Overview
- Managing/Troubleshooting Collectors
- Managing/Troubleshooting Routers
- Collector Auto-registration
- Router Auto-registration

RF Mesh Deploying Meters

Pre-requisites: None
Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

Meters equipped with a RF Mesh radio are "plug and play". They arrive in operational state, ready to be installed in the field. In this session, participants will learn the steps necessary to deploy meters via Command Center, techniques for managing meter change-outs, as well as learn how to monitor and troubleshoot deployment.

Audience: AMI System Administrator, Network Administrator, Metering and other personnel that will be responsible for deploying and monitoring meters.

- Auto-registration
- Deploying Meters
- Monitoring Meter Change-outs
- Importing Meter Files
- Tracking Meter Deployment
- RF Endpoint Configuration

RF Mesh Command Center Managing Endpoints

Pre-requisites: None
Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

Command Center is the primary tool that the utility will use to manage and troubleshoot the RF Mesh system. In this session, participants will be introduced to the reports, commands and functions available to manage the devices in the network.

Audience: AMI System Administrator, Network Administrator, Metering, Billing and other personnel responsible for management of the system.

- RF Endpoint Information
- Managing Endpoints
- Broadcasting
- Daily Reads & Interval Reads
- Group Addressing

RF Mesh Command Center Daily System Monitoring

Pre-requisites: None
Class Length: 150-180 Minutes **Credits:** 6 **Fee:** $300

Command Center provides a variety of dashboard, reports, and graphical displays to assist in the monitoring of the RF Mesh network. In this session, participants will learn the day to day activities necessary for managing their system.

Audience: AMI System Administrator, Network Administrator.

- Analyzing the Daily Reads Status Report
- Endpoint and Meter Alerts
- Monitoring the System Map
- Monitoring the AMI Dashboard
- Monitoring the Log Viewers
- Monitoring the Real Time Outage Map

RF Mesh Command Center Billing and Customer Service Tools

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

Command Center provides billing and customer service personnel with tools needed to extract readings information for billing purposes as well as customer service functions and reports. In this session, participants will learn how to setup billing extracts, as well as learn the reports provided to work with customers of the utility.

Audience: AMI System Administrator, Billing and Customer Service personnel

- Billing Setup
- Service History Report
- Connect/Disconnect Management
- Scheduling Billing Extracts
- Meter History Viewer

RF Mesh - Understanding the GAP Reconciliation Process

Pre-requisites: RF Mesh Command Center Introduction Training is preferred, but not required.

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

Gap Reconciliation is an automated Command Center process to collect missing interval and self-read data from Time of Use (TOU), interval and demand meters. In this session participants will become familiar with the standard readings protocol for RF Mesh meters, as well as how to enable and configure the system to automatically retrieve missing daily and interval readings.

Audience: AMI System Administrator and personnel responsible for management of the system.

- Readings Protocol
- Gap Reconciliation Settings
- Viewing Interval Data Gaps
- What is Gap Reconciliation
- Gap Request Commands
- Daily Reads Status Reports

RF Mesh – Custom Configuration of RF Mesh Endpoints

Pre-requisites: RF Mesh Command Center Introduction Training is preferred, but not required.

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

The RF Mesh configuration group drives the scheduled commands, the alarm priorities and the network settings of a group of devices. In this session, participants will learn the default configuration settings of various meter models, as well as the functions to customize the configuration to meet utility needs.

Audience: AMI System Administrator, Engineering, and other personnel wishing to understand endpoint configuration.

- Default Configuration Groups
- Alarm Definitions
- Network Settings
- Reconfiguration Process
- Configuration Group Components
- Packet Definitions
- Creating Configuration Groups
- Troubleshooting Reconfiguration

RF Mesh – Configuring Scheduled Demand Resets

Pre-requisites: RF Mesh Command Center Introduction Training is preferred, but not required.

Class Length: 150-180 Minutes **Credits:** 6 **Fee:** $300

The purpose of the Demand Reset is to capture peak demand values and the times at which those values were recorded since the last time the reset procedure was executed. In this session participants will learn how to setup scheduled reads for demand resets in the RF Mesh system. In addition, best practices for monitoring and troubleshooting demand resets will be discussed.

Audience: AMI System Administrator and Billing personnel

- Understand the Demand Reset Process
- Demand Reset Schedule Setup
- Understanding and Configuring Demand Reset Parameters
- Manual Demand Resets
- Monitoring Scheduled Demand Resets

RF Mesh - Implementing Home Area Network Devices

Pre-requisites: RF Mesh Command Center Introduction

Class Length: 150-180 Minutes **Credits:** 6 **Fee:** $300

The HAN solution is comprised of multiple components to provide a complete integrated environment for a utility to access and manage in-premise HAN devices. In this session, participants will gain a basic understanding of the ZigBee technology, learn how to commission and manage HAN devices using Command Center.

Audience: AMI System Administrator and personnel responsible for deploying and managing HAN devices.

- HAN Overview
- Smart Energy and the RF Mesh Solution
- Managing HAN Devices
- ZigBee Overview
- Creating a Home Area Network
- Testing and Troubleshooting

RF Mesh - Implementing Two-Way Water Meters

Pre-requisites: RF Mesh Command Center Introduction

Class Length: 150-180 Minutes **Credits:** 6 **Fee:** $300

RF water modules are two-way battery-powered devices. They communicate with electric meters and network devices to send reading data to the Command Center via the RF Mesh network. In this session, participants will learn the skills needed to install, register and manage two-way water meters in the RF Mesh Solution.

Audience: AMI System Administrator and RF field technicians involved with the installation of Two-Way Water meters.

- Two-Way Water Overview
- Managing Two-Way Water Meters in Command Center
- Deploying Two-Way Water Meters

RF Mesh - Implementing Two-Way Gas Meters

Pre-requisites: RF Mesh Command Center Introduction

Class Length: 150-180 Minutes **Credits:** 6 **Fee:** $300

RF gas modules are two-way battery-powered devices. They communicate with electric meters and network devices to send reading data to the Command Center via the RF Mesh network. In this session, participants will learn the skills needed to install, register and manage two-way gas meters in the RF Mesh Solution.

Audience: AMI System Administrator and RF field technicians involved with the installation of Two-Way Gas meters.

- Two-Way Gas Overview
- Managing Two-Way Gas Meters in Command Center
- Deploying Two-Way Gas Meters
- Working with Two-Way Gas Meters in ETM

RF Mesh Over-the-Air (OTA) Meter Reprogramming

Pre-requisites: RF Mesh Command Center Introduction Training is preferred, but not required.

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

Meter reprogramming allows a utility to make changes to meter program attributes. Once an electric meter has been manufactured, programmed in the factory and delivered to the utility customer, the customer may wish to make changes to the meter program. In this session, participants will become familiar with the use of the Meter Program Download command introduced in Command Center 6.4, which allows the user to send both full and partial meter programs over-the-air from Command Center without using Landis+Gyr as an intermediary.

Audience: AMI System Administrator, Engineering, and other personnel wishing to understand OTA meter reprogramming.

- What is OTA Meter Reprogramming
- Issuing the Meter Program Download Command
- OTA Meter Reprogramming Recommended Processes
- The OTA Meter Reprogramming Process
- OTA Meter Reprogramming Settings
- Monitoring Meter Program Downloads

RF Mesh Security Implementation Online Training

RF Mesh Advanced Encryption Mode - Configuration

Pre-requisites: Basic understanding of security concepts

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

Security is an important feature of Command Center and the RF mesh network. It helps to prevent service interruptions or blockages, unauthorized control, loss or corruption. Advanced Encryption Mode is the most secure approach. It provides strong mechanisms to prevent systemic attacks on the system. In this session, participants will learn the steps necessary to implement Advanced Security in their network.

Audience: Security Administrator

- RF Mesh Advanced Security Overview
- Creating Security Configuration Groups
- User Maintenance
- Export/Import of Security Tokens
- Security Reconfiguration Process

RF Mesh Advanced Encryption Mode – Monitoring and Troubleshooting

Pre-requisites: Basic understanding of security concepts

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

Command Center provides a variety of dashboard, reports, and graphical displays to assist in the monitoring of security in the RF Mesh network. In this session, participants will learn the day to day activities necessary to monitor and trouble shoot the advanced security in the network.

Audience: Security Administrator

- Monitoring the Security Dashboard
- Monitoring the Security Event Log
- Monitoring the Security Reconfiguration Process
- Troubleshooting Endpoints

RF Mesh Standard Encryption Mode - Configuration

Pre-requisites: Basic understanding of security concepts

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

Standard Encryption mode allows the utility to encrypt messages on the network using a utility specific encryption key. In this session, participants will learn the tasks necessary to create utility specific encryption keys and configure their network devices for standard encryption.

Audience: Security Administrator

- RF Mesh Standard Security Overview
- Creation of System Key with RadioShop
- Security Reconfiguration Process
- Export/Import of Security Tokens
- Security Configuration Groups

RF Mesh Standard Encryption Mode – Monitoring and Troubleshooting

Pre-requisites: RF Mesh Standard Encryption Mode Configuration WebEx. Basic understanding of security concepts

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

Command Center provides a variety of dashboard, reports, and graphical displays to assist in the monitoring of security in the RF Mesh network. In this session, participants will learn the day to day activities necessary to monitor and troubleshoot Standard security in the network.

Audience: Security Administrator

- Monitoring the Security Dashboard
- Troubleshooting Endpoints
- Monitoring the Security Reconfiguration Process
- Monitoring the Security Event Log
- Security Reconfiguration Process

RF Mesh – Advanced Encryption Mode – Key Rolling

Pre-requisites: RF Mesh Standard Encryption Mode Configuration WebEx. Basic understanding of security concepts

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

Command Center provides an automated process to roll both the utility public key and the individual endpoint keys. In this session, participants will learn the processes for configuring key rolling, become familiar with the Security reconfiguration process, as well as learn the steps for rolling the Segment key.

Audience: Security Administrator

- Organization Information Settings
- System Settings
- Utility Key Generation
- Process Settings
- Security Reconfiguration Process

RF MESH NETWORK DEPLOYMENT ONLINE TRAINING

RF Mesh Network Site Survey

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

In RF Mesh Network planning and design, various factors are taken into account to maximize network performance. In this session, participants will be familiarized with the Landis+Gyr network design process, and will learn the steps performed to validate the design through collector and router site surveys.

Audience: AMI System Administrator, Network Administrator, RF Field Technicians

- Landis+Gyr Design Process
- Router Site Survey
- Collector Site Survey
- Verification of Locations

RF Mesh C7400/C7500 Collector Installation and Configuration

Pre-requisites: None

Class Length: 120-150 Minutes **Credits:** 6 **Fee:** $300

RF Mesh Collectors provide the interface between the RF Mesh Network and Command Center. In this session, participants will learn the steps necessary to install and configure the C7000-Series Collector.

Audience: AMI System Administrator, Network Administrator, RF Field Technicians

- Collector Overview
- Collector and Antenna Installation
- Configuration and Management of Collectors via Command Center
- Collector Site Survey
- Configuring Command Center with ETM

RF Mesh C6400/C6500 GAP Collector Installation and Configuration

Pre-requisites: None

Class Length: 120-150 Minutes **Credits:** 6 **Fee:** $300

RF Mesh Collectors provide the interface between the RF Mesh Network and Command Center. In this session, participants will learn the steps necessary to install and configure the C6000-Series Collector.

Audience: AMI System Administrator, Network Administrator, RF Field Technicians

- GAP Collector Overview
- Configuration Using ETM
- Auto-registration
- Backhaul Configuration
- Collector Installation
- Configuration and Management of Collectors

RF Mesh – Router Installation and Configuration

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

Routers provide the backbone of the RF Mesh Network. In this session, participants will learn how to configure and install routers, as well as the functions available in Command Center for managing the devices.

Audience: AMI System Administrator, Network Administrator, RF Field Technicians

- Router Overview
- Router Configuration
- Router Site Survey
- Router Installation

RF Mesh Tools – Endpoint Testing Manager

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

Endpoint Testing Manager (ETM) software provides the user the ability to verify accurate module to meter, meter to module, module to network and network to module communications. In this session, participants will learn the procedures from using ETM to test modules/meters, as well as reset modules when returned from the field.

Audience: AMI System Administrator, Network Administrator, Meter Shop Personnel

- Workstation Setup
- Generating Reports
- Resetting Modules to Installation Mode
- Performing Meter Tests
- Upgrading DCW and Firmware

RF Mesh Tools – RadioShop

Pre-requisites: None

Class Length: 150-180 Minutes **Credits:** 6 **Fee:** $300

RadioShop software provides access to the RF Mesh Network and is used for configuring and monitoring radios on the RF Mesh network. In this session, participants will become familiar with the RadioShop application, and learn how to use it as a configuration and troubleshooting tool.

Audience: AMI System Administrator, Network Administrator, RF Field Technicians

- RadioShop Overview and Setup
- Monitoring the Network
- Working with Radios
- Managing Collectors

RF Mesh – Monitoring and Troubleshooting Collectors (C7400 and C6400)

Pre-requisites: RF Mesh Command Center Introduction, RF Mesh Network Deployment, RadioShop Training

Class Length: 150-180 Minutes **Credits:** 6 **Fee:** $300

RF Mesh Collectors provide the interface between the RF Mesh Network and Command Center. In this session, participants will learn how to use various Command Center Reports along with RadioShop to identify, troubleshoot, and resolve issues within their RF Mesh Collectors.

Audience: AMI System Administrator, Network Administrator and field personnel responsible for troubleshooting the network.

- Upgrading Collector Code
- Collector Communication Issues
- Device Radio Statistics Report
- Hardware Troubleshooting
- Collector Events
- Monitoring Collector Statistics
- Investigation with RadioShop

RF Mesh – Monitoring and Troubleshooting Routers

Pre-requisites: RF Mesh Command Center Introduction, RF Mesh Network Deployment, and RadioShop Training

Class Length: 150-180 Minutes **Credits:** 6 **Fee:** $300

Routers provide the backbone to the RF Mesh Network; therefore, monitoring routers on a regular basis ensures that the network is performing optimally. Participants of this session will learn how to use various Command Center Reports along with RadioShop to identify, troubleshoot, and resolve issues with the routers in the network.

Audience: Network Administrator and personnel responsible for troubleshooting the routers in the network.

- Troubleshooting Routers by Status
- Router Events
- Router Preventative Maintenance
- Troubleshooting with RadioShop
- Device Radio Statistics Report

RF Mesh – Monitoring and Troubleshooting Meters

Pre-requisites: RF Mesh Command Center Introduction, RF Mesh Network Deployment, and RadioShop Training

Class Length: 150-180 Minutes **Credits:** 6 **Fee:** $300

Command Center provides a variety of reports and dashboards that allow the utility to monitor the performance of the AMI meters. In this session, participants will learn how to use various Command Center Reports along with RadioShop to identify, troubleshoot, and resolve issues within their RF Mesh Network.

Audience: AMI System Administrator and/or personnel responsible for troubleshooting the endpoints in the network.

- Troubleshooting by Endpoint Status
- Endpoints Alerts
- Troubleshooting with RadioShop
- Meter Alerts

RF Mesh – Performing Firmware/DCW Upgrades

Pre-requisites: RF Mesh Command Center Introduction, RF Mesh Network Deployment, RadioShop Training

Class Length: 150-180 Minutes **Credits:** 6 **Fee:** $300

Landis+Gyr provides customers with firmware download files whenever there are new images available. Within the RF Mesh network, over the air firmware downloads are supported, and all efforts should be made to use Command Center for firmware downloads. In this session, participants will learn how to use Command Center to properly upgrade firmware and DCW for devices in their RF Mesh Network. RadioShop will also be presented, as a monitoring/troubleshooting tool.

Audience: AMI System Administrator, Network Administrator and field personnel responsible for upgrading firmware and DCW on the network devices.

- Importing Firmware .hfz Files
- Execution and Planning Recommendations
- Monitoring the Firmware Upgrade Process
- Preparing for the Upgrade
- Broadcasting Firmware
- Upgrading Firmware with RadioShop

GRIDSTREAM RF TOOLS

Gridstream RF Tools – Tech Studio

Pre-requisites: None

Class Length: 120-150 Minutes **Credits:** 4 **Fee:** $200

Tech Studio software will allow users to interface with Two-Way Gas and Electric modules in both RF Mesh IP and RF Mesh networks. It provides the user the ability to verify accurate module/meter configuration, module/meter communication, as well as numerous different reporting options. In this session, participants will learn how to navigate the software, test modules/meters, reset modules when returned from the field, generate reports, and upgrade firmware.

Audience: AMI System Administrator, Network Administrator, Meter Shop Personnel

- Setting Up Communications
- Performing Meter Tests
- Generating Reports
- Navigating the Software
- Interacting with a Meter

RF MESH GRID AUTOMATION TRAINING - ONLINE

RF Mesh Grid Automation Solution Overview

Pre-requisites: None

Class Length: 120-150 Minutes **Credits:** 4 **Fee:** $200

The Landis+Gyr Grid Automation Solution provides a communication means to acquire data and control remote DA devices, along with supporting peer-to-peer device communication. The system can be deployed standalone or in conjunction with Landis+Gyr AMI systems. In this session, attends will be provided an overview of the implementation of Grid Automation in the RF Mesh solution.

Audience: AMI System Administrator, Network Administrators and other personnel who wish to gain an understanding of Grid Automation in the RF Mesh solution.

- What is Distribution Automation
- Primary Functions of DA/SCADA
- RF Mesh Radios and Connections
- What is SCADA
- DA System Components
- Preparing DA Solutions Communication

RF Mesh - Troubleshooting the Grid Automation Network

Pre-requisites: RF Mesh Grid Automation Solution Overview WebEx, Network Tools – RadioShop WebEx

Class Length: 150-180 Minutes **Credits:** 6 **Fee:** $300

RadioShop software is a tool that can be used to analyze the Grid Automation network. This session will provide a basic overview of techniques that can be used to troubleshoot issues in the DA network.

Audience: Grid Automation System and Network Administrators, as well as personnel interested in learning the management capabilities in Command Center.

- Troubleshooting Connectivity
- Troubleshooting Techniques
- RadioShop Troubleshooting Reports

RF Mesh Implementing Grid Automation in Command Center

Pre-requisites: RF Mesh Command Center Introduction (classroom or WebEx training), RF Mesh Grid Automation Solution Overview

Class Length: 150-190 Minutes **Credits:** 6 **Fee:** $300

Command Center 5.0 introduced the ability to manage the networking capability of various Grid Automation devices. In this session, participants will receive an overview of the tools available to implement and manage Grid Automation devices through the Command Center software.

Audience: Grid Automation System and Network Administrators, as well as personnel interested in learning the management capabilities in Command Center.

- Grid Automation Device Deployment
- Managing Grid Automation Devices
- Monitoring Grid Automation Devices
- Auto-registration
- Grid Automation Events & Alarms

MDMS Online Training

MDMS System Overview

Pre-requisites: None

Class Length: 150-180 Minutes **Credits:** 6 **Fee:** $300

A key component of advanced metering infrastructure (AMI) systems, MDMS transforms volumes of automated meter reading (AMR) data collected from electric, gas, and water meters into business intelligence. In this session, participants will be provided an overview of the MDMS system, and learn the core MDMS processing functions.

Audience: All involved in a project.

- MDMS Solution Overview
- DSE
- Meter Load Processing
- WAVE/iWAVE
- MDMS Solution Components
- Meter Reading Gateways
- Meter Readings Analytics

MDMS Introduction to Validation, Estimating, Editing (VEE)

Pre-requisites: MDMS System Overview

Class Length: 150-180 Minutes **Credits:** 6 **Fee:** $300

The automated validation engine applies complex, rule-based validation, estimation and editing (VEE) algorithms which certify daily meter reads and load profile readings regardless of deployed AMI technology. In this session, participants will gain an understanding of the rules used for validation and estimation, as well as learn how to customized VEE for utility specific business requirements.

Audience: System Administrators, Billing

- EMED Processes
- MRA Processes
- Device Groups forWAVE/iWAVE
- WAVE Consumption Summary Report
- Meter Reading Gateways
- Customizing WAVE/iWAVE
- Read Status Summary Report
- WAVE Demand Summary Report

Managing Meter Exceptions in MDMS Navigator

Pre-requisites: Introduction to Validation, Estimating, Editing (VEE) recommended

Class Length: 150-180 Minutes **Credits:** 6 **Fee:** $300

The Meter Exceptions tool ensures business-critical validation failures (such as a meter reset) are prevented from going to Billing. In this session, participants will learn to identify, and manage exceptions reported by the VEE engine.

Audience: System Administrators, Billing.

- VEE Overview
- Managing WAVE Exceptions
- Read Status Summary Report
- WAVE Demand Summary Report
- Viewing Meters
- Managing iWAVE Exceptions
- WAVE Consumption Summary Report

Network Performance Monitor & Service Orders: Setup & Management

Pre-requisites: MDMS System Overview recommended

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

The Network Performance Monitor & Reporting Engine (NPM) identifies irregular alerts, consumption, alarms, and other abnormal activity and proactively generates the necessary reports, service orders, or any user defined actions, resulting in operational efficiencies. In this session, participants will learn to configure the NPM and Service Order engines for utility specific business cases.

Audience: Billing, Field Personnel.

- NPM Configuration
- Managing Service Orders
- NPM Outage Summary Report
- Service Order Configuration
- NPM Event Summary Report
- Service Order Report

MDMS Configuring Reference Data

Pre-requisites: Introduction to Validation, Estimating, Editing (VEE) recommended

Class Length: 90-120 Minutes **Credits:** 6 **Fee:** $200

Reference Data is utility specific data that the MDMS requires to perform the functions required for validation, estimation, editing, and billing. In this session, participants will learn the function of each reference data element, and learn the skills to configure the reference data specific to the utility's business functions.

Audience: System Administrators, Billing.

- Understanding Reference Data Use
- Configuring Device Programs
- Configuring Billing Cycles
- Configuring Time of Use
- Configuring Program Readings

Understanding MDMS Data Synchronization Engine

Pre-requisites: MDMS System Overview recommended

Class Length: 150-180 Minutes **Credits:** 6 **Fee:** $300

The Data Synchronization Engine (DSE) ensures the integrity and accuracy of the data by automatically synchronizing core customer and account information as well as point-of-delivery data stored in the Meter Data Repository with master utility databases. In this session, participants will be provided an understanding of the three main DSE Interfaces (DBMaint, DBSync, Published Reads Service), as well as gain an understanding of the MDMS 24-hour processing.

Audience: System Administrators, Billing.

- DSE Processes
- DBSync
- Interfaces
- DBMaint
- Published Reads Service
- MDMS 24-Hour Processing

MDMS UX – Administrator Training

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

The MDMS User Interface provides a comprehensive, efficient user experience when working with the RF Mesh Meter Data Management System (MDMS). This interface currently works in conjunction with the MDMS Navigator User Interface. In this session, participants will learn how to configure the MDMS UX to meet business needs.

Audience: System Administrators.

- Setting Up Feature Groups & User Profiles
- ODE Configuration
- Setting Up UX
- Usage Views

Landis+Gyr Advanced Load Management (ALM) Classroom Training

Advanced Load Management

Pre-requisites: None

Class Length: 2 Day **Credits:** 8 **Fee:** $800

Landis+Gyr's Advanced Load Management (ALM) system includes two browser-based interface portals, a Home Energy Manager portal for customers and a Power Center portal for utility and support personnel. The system not only allows customers to manage their energy usage, it also allows the utility to override normal operation of managed equipment to curtail energy usage when necessary to avoid a demand peak. In this session, participants will be introduced to the features of the ALM system for use in the Smart Grid solution.

Audience: ALM System Administrators, ALM Customer Service Personnel.

- System Overview
- Utility Operations
- Thermostat Management
- Customer Support Operations
- Direct Load Control Management

Landis+Gyr Advanced Load Management Training - Online

Landis+Gyr Advanced Load Management System Overview

Pre-requisites: None

Class Length: 90 Minutes **Credits:** 2 **Fee:** $100

Landis+Gyr's Advanced Load Management (ALM) system includes two browser-based interface portals, a Home Energy Manager portal for customers and a Power Center portal for utility and support personnel. The system not only allows customers to manage their energy usage, it also allows the utility to override normal operation of managed equipment to curtail energy usage when necessary to avoid a demand peak. In this session, participants will be introduced to the features of the ALM system for use in the Smart Grid solution.

Audience: ALM System Administrators, ALM Customer Service Personnel.

- System Overview
- Power Center Overview
- Thermostat Management
- Home Energy Manager Overview
- Direct Load Control

Landis+Gyr Advanced Load Management Customer Support Operations

Pre-requisites: Landis+Gyr Advanced Load Management System Overview

Class Length: 120-150 Minutes **Credits:** 4 **Fee:** $200

Landis+Gyr's Advanced Load Management (ALM) system includes two browser-based interface portals, a Home Energy Manager portal for customers and a Power Center portal for utility and support personnel. The Home Energy Manager portal gives users access to their various in home devices and gives them the ability to manage and monitor them. In this session, participants will be introduced to the features of the Home Energy Manager portal.

Audience: ALM System Administrators, VPP Customer Service Personnel.

- Accessing Customer Accounts
- Opting out of Conservation Events
- Managing In-Home Devices

Landis+Gyr Advanced Load Management Utility Operations

Pre-requisites: Landis+Gyr Advanced Load Management System Overview

Class Length: 120-150 Minutes **Credits:** 4 **Fee:** $200

Landis+Gyr's Advanced Load Management (ALM) system includes two browser-based interface portals, a Home Energy Manager portal for customers and a Power Center portal for utility and support personnel. The Power Center is the utilities portal to manage and monitor the ALM solution. In this session, participants will be introduced to the features of the Power Center portal.

- Understanding the Dashboard
- Managing Users
- Managing Conservation Events

ADVANCED GRID ANALYTICS (AGA) ONLINE TRAINING

Advanced Grid Analytics - Reliability

Pre-requisites: None

Class Length: 180-240 Minutes **Credits:** 8 **Fee:** $400

GRIDplan Reliability is a software platform that utilizes historic outage information to chart reliability details on a geospatial map in order to analyze the data. The utility can then run simulations to find the best solutions based on cost or performance improvement. In this session users will learn how to navigate the software, plus learn how to setup and run different types of case studies to improve reliability.

Audience: Utility Planners, Engineers, and Operators

- Navigating the Outage View
- Create an Optimized Case Study
- Create a Manual Case Study
- Create a Switch Optimization Case Study

Advanced Grid Analytics - Distributed Energy Resources (DER)

Pre-requisites: None

Class Length: 180-240 Minutes **Credits:** 8 **Fee:** $400

GRIDplan Distributed Energy Resources (DER) is a software platform that allows a utility to analyze the impact of their existing DER equipment. It also allows planners to quickly evaluate and achieve optimal placement of new DER equipment which will result in a better performing grid. In this session users will learn how to navigate the software, plus learn how to run and compare various case studies to achieve their performance goals.

Audience: Utility Planners, Engineers, and Operators

- Create Load Flow & Optimization Case Study
- Comparing Studies
- Create a DER Impact Case Study
- Study Analysis

Advanced Grid Analytics - Fault Circuit Indicator (FCI)

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

GRIDplan Fault Circuit Indicator (FCI) is a software platform that allows utility personnel to accurately determine the most cost-effective type, number, and placement of fault circuit indicators (FCI) in any given distribution network to improve network reliability. In this session users will learn how to navigate the software, plus learn how to create and analyze case studies for FCI planning.

Audience: Utility Planners, Engineers, and Operators

- Create a FCI Case Study
- Navigate the Software
- Analyze the Results

Advanced Grid Analytics - Asset Loading

Pre-requisites: None

Class Length: 120-180 Minutes **Credits:** 4 **Fee:** $200

GRIDview Asset Loading is a software platform that allows utility personnel to view load characteristics at the Substation, Feeder, and Transformer levels. The software makes it easy to display critical or high priority levels within the various assets, making it quick and easy to assess areas where grid equipment may not be appropriately allocated. In this session the user will learn how to navigate the software, plus analyze the results to determine possible areas needing improvement.

Audience: Utility Planners, Engineers, and Operators

- Substation Loading
- Feeder Loading
- Transformer Loading

Advanced Grid Analytics - Voltage Visualization

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

GRIDview Voltage Visualization is a software platform that allows utility personnel to monitor network health by viewing asset performance of transformers and meters. This visualization results in improved strategies for transformer and meter voltage and asset management, revenue protection, and demand response programs. In this session users will learn how to navigate the software, plus analyze the results to determine possible areas needing improvement.

Audience: Utility Planners, Engineers, and Operators

- Transformer Voltage Visualization
- Meter Voltage Visualization

POWER LINE CARRIER TECHNOLOGY

PLX CLASSROOM TRAINING

PLX Command Center Introduction

Pre-requisites: None

Class Length: 3 Days **Credits:** 24 **Fee:** $1200

PLX builds upon Landis+Gyr's 15 years of history developing PLC networks for advanced metering. In this session, participants will learn the basic and intermediate features of Command Center for managing their PLX system. Students will perform normal day-to-day functions including deploying meters, changing out meters, monitoring the system and troubleshooting. Hands-on training and exercises will provide those attending with the ability to manipulate information using the PLX Command Center software.

Audience: AMI System Administrator and utility personnel that needs to understand all aspects of the PLX system.

- PLX System Overview
- Working with Substations and Collectors
- Daily System Monitoring
- Command Center Reports
- Command Center Setup & Configuration
- Programming and Deploying PLX Modules
- Managing PLX Endpoints
- Billing and Extract Tools

PLX Network Deployment Training

Pre-requisites: Observe a minimum of one substation commissioning by Landis+Gyr Field Services Representative.

Class Length: 3 Days **Credits:** 24 **Fee:** $1200

In the PLX system, the components installed at the substation are used to transmit and receive signals to/from endpoints. In this session, participants will learn the best practices for installation of substation equipment, receive hands on testing experience, and learn the Command Center associated setup processes. This course is offered at the Pequot Lakes training facility. Contact Landis+Gyr Technical Training Department for required tools.

Audience: Personnel that will be responsible for the commissioning of the substation equipment.

- Overview of PLX System
- Programming Collectors
- Validation Tests
- Final Documentation Requirements
- Overview of Substation Equipment
- Collector/TCU Installation Guidelines
- Collector Configuration in Command Center

PLX ONLINE TRAINING

PLX Solution Overview

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

Landis+Gyr PLX Solution capitalizes on 15 years of power line carrier technology experience to deliver the industry's most powerful PLC AMI in the marketplace. PLX is an AMI solution that delivers those must have smart grid applications with the capacity to adapt to future market needs.

Audience: AMI System Administrator and all individuals at the utility wishing a general understanding of the PLX Solution.

- PLX Solution Overview
- Elements of the PLX Solution

PLX 3000 Initial Collector Setup

Pre-requisites: None

Class Length: 30-60 Minutes **Credits:** 2 **Fee:** $100

The PLX 3000 Collector requires new setup measures when connecting to it for the first time. In this session users will learn about the new setup procedures for the PLX 3000 collector, how to connect to the collector for the first time, how to setup user accounts, and how to configure the network settings.

Audience: Security Administrator

- PLX 3000 Collector Overview
- User Setup
- Web Tunnel Software
- Network Settings

PLX Command Center Setup & Management

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

User access, global settings and rules are established by the utility upon initial installation of Command Center. In this session, participants will learn how to setup Command Center for initial use, as well as become familiar with on-going processes and maintenance tasks.

Audience: AMI System Administrator, Network Administrator, Security Administrator and decision makers in all other departments within the utility.

- Command Center Overview
- Organization and Process Settings
- Working with Command Center Licensing
- User Access Management

PLX Command Center Managing Substations and Collectors

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

The Collector provides the communication interface between the PLX system and Command Center. In this session, participants will learn the steps necessary to configure collectors using the Command Center software.

Audience: AMI System Administrator, Network Administrator and IT personnel.

- Collector Overview
- Adding and Configuring Collectors
- Adding Substations
- Managing Collectors

PLX Programming and Deploying Endpoints

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

Meters equipped with a PLX module are "plug and play". They arrive in operational state, ready to be installed in the field. In this session, participants will learn the steps necessary to deploy meters via Command Center, techniques for managing meter change-outs, as well as how to configure modules for custom applications.

Audience: AMI System Administrator, Metering and personnel that will be responsible for managing the PLX meter deployment.

- PLX Configuration Groups
- Managing the Meter Change Out Process
- Meter Deployment Processes
- PLX Find Process

PLX Managing Endpoints

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

Command Center is the primary tool that the utility will use to manage and troubleshoot the PLX system. In this session, participants will be introduced to the commands and functions available to manage the devices in the field.

Audience: AMI System Administrator, Network Administrator, Metering, Billing and other personnel responsible for management of the system

- User Defined Command Addressing Groups
- Available Endpoint Commands
- Scheduled Reads

PLX Daily System Monitoring

Pre-requisites: None

Class Length: 150-180 Minutes **Credits:** 6 **Fee:** $300

Command Center provides a variety of dashboard, reports, and graphical displays to assist in the monitoring of the PLX system. In this session, participants will learn the day to day activities necessary for managing their system.

Audience: AMI System Administrator, Network Administrator, Metering and any personnel involved in the monitoring of the PLX system.

- PLX Readings Processing Status Report
- Collector Events
- Analyzing the Log Viewer
- Monitoring the AMI Dashboard
- System Alerts
- Understand the Meter History Viewer

PLX Command Center Reports

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

Command Center provides a variety of reports that can be used to monitor and troubleshoot the PLX system, as well as reports used by the utilities customer service personnel. In this session, participants will become familiar with how to generate and analyze these reports.

Audience: AMI System Administrator, Network administrator, Engineering, Billing and Customer Service personnel.

- PLX Readings Processing Report
- Signal Quality Reports
- Interruption Reports
- Outage Tracker
- Meter Exceptions
- Downstream Performance Reports
- Service History Report
- Transaction Log

PLX Command Center Billing

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

Command Center provides billing personnel with tools needed to extract readings information for billing purposes. In this session, participants will learn how to setup billing extracts, as well as learn the reports provided to reads availability. This session covers TS1, TS2 and PLX.

Audience: AMI System Administrator and Billing Personnel

- Working with Billing cycles
- Scheduling Data Extract
- Final Readings (TS2 and PLX)
- Data Extract Setup
- Utilizing the Billing Progress Report

PLX Setting Up Demand Billing Schedules

Pre-requisites: PLX Programming and Deploying Endpoints

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

The purpose of the demand reset is to capture peak demand values and the times at which those values were recorded since the last time the reset procedure was executed. Command Center may be used to configure PLX endpoints to reset on a scheduled basis. In this session, participants will learn how to configure endpoints for demand reset and monitor demand reset success.

Audience: AMI System Administrator and Billing Personnel

- Setting Up Demand Billing Configuration
- Monitoring Demand Resets
- Configuring Endpoints for Demand Billing

PLX Custom Configuration

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

Meters equipped with a PLX module are “plug and play”. Using a default configuration group, the endpoint will report daily and load profile to Command Center. In this session, participants will learn how to configure modules for custom applications.

Audience: AMI System Administrator, Engineering, and Metering Personnel

- PLX Default Configuration Groups
- Re-configuration Process
- Creating Custom Configuration Groups

Differences between PLX and TS2 PLC Systems

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

PLX builds upon Landis+Gyr’s 20 years of history developing PLC networks for advanced metering. By adding the capacity and fast response times required to meet the smart grid demands of today and tomorrow, PLX is better able to deliver data and connectivity required for the most advanced applications in this session participants will become familiar with the differences between their PLX and TS2 PLC systems

Audience: AMI System Administrator, Network Administrator, and other utility personnel wishing to understand the difference between the two systems.

- PLX Communication
- Endpoint Find Process
- On-demand Reads
- Hardware Components
- Configuration

PLX Endpoint Administration Software

Pre-requisites: None

Class Length: 120-150 Minutes **Credits:** 4 **Fee:** $200

Landis+Gyr PLX Endpoint Administration Software (EAS) is a PC-based software application that is used for programming and troubleshooting all PLX endpoint types. In this session, participants will learn the processes for working with EAS and the Optowand+ for communications and troubleshooting endpoints.

Audience: AMI System Administrator, Metering and any other personnel that will be programming meters in the meter shop or in the field.

- Overview of OptoWand+
- Programming Endpoints
- Firmware Updates
- EAS Configuration
- Diagnostics

TS2 Technology Classroom Training

TS2 Command Center Introduction

Pre-requisites: None

Class Length: 3 Days **Credits:** 24 **Fee:** $1200

TS2 technology maintains continuous, unsolicited communication with each device on the network. The system is operated by Command Center software. In this session, participants will learn the day to day functions needed to deploy collectors and meters, manage meters, and troubleshoot their TS2 system.

Audience: AMI Administrator and any other utility personnel that need to understand all aspects of the TS2 system.

- TS2 System Overview
- Working with Substations and Collectors
- Managing TS2 Modules
- Command Center Reports
- Command Center Setup and Configuration
- Programming and Deploying TS2 Modules
- Daily System Monitoring
- Billing and Customer Service Tools

TS2 Substation Installation Certification Training

Pre-requisites: Observe a minimum of one substation commissioning by Landis+Gyr Field Services Representative.

Class Length: 3 Days **Credits:** 24 **Fee:** $1200

In the TS2 system, the components installed at the substation are used to transmit and receive signals to/from endpoints. In this session, participants will learn the best practices for installation of substation equipment, receive hands on testing experience, and learn the Command Center associated setup processes. This course is offered at the Pequot Lakes training facility.

Audience: Personnel that will be responsible for the commissioning of the substation equipment. Contact the Landis+Gyr Technical Training Department for required tools.

- Overview of TS2 System
- Programming Collectors
- Validation Tests
- Final Documentation Requirements
- Overview of Substation Equipment
- Collector/TCU Installation Guidelines
- Collector Configuration in Command Center

TS2 Command Center Advanced

Pre-requisites: TS2 Command Center Introduction or appropriate experience

Class Length: 2 Days **Credits:** 16 **Fee:** $800

The TS2 technology maintains continuous, unsolicited communication with each device on the network. The system is operated by Command Center™ software. In this session, participants will learn advanced features of the system, as well as techniques for troubleshooting more effectively.

Audience: AMI System Administrator, Network Administrator and other utility personnel responsible for monitoring and troubleshooting the system.

- TS2 System Overview
- Outage Detection
- Troubleshooting the TS2 System
- Advanced Collector Management
- System Management

TS2 Online Training

Differences between TS1 and TS2 PLC System

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

Landis+Gyr offers both a one-way and a two-way power line carrier system. In this session participants will become familiar with the differences between the two systems.

Audience: AMI System Administrator, Network Administrator, Metering and other personnel who will be involved with the TS2 system.

- TS2 Communication Path
- Endpoints Supported
- Find Process
- On Demand Eads
- Substation Equipment
- Plug and Play Functionality
- Packet Timing
- Demand Reset

TS2 Command Center Setup and Management

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

User access, global settings and rules are established by the utility upon initial installation of Command Center. In this session, participants will learn how to setup Command Center for initial use, as well as become familiar with on-going processes and maintenance tasks.

Audience: AMI System Administrator, Network Administrator, Security Administrator and decision makers in all other departments within the utility.

- Command Center Overview
- Organization Information Settings
- Process Settings
- Working with Command Center Licensing
- Organization Locations
- User Access Management

TS2 Programming and Deploying Endpoints

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

Meters equipped with a TS2 endpoint are “plug and play”. They arrive in operational state, ready to be installed in the field. In this session, participants will learn the steps necessary to deploy meters via Command Center, techniques for managing meter change-outs, as well as learn the default configuration settings of the TS2 endpoints.

Audience: AMI Administrator, Metering and any other personnel that will be programming meters in the meter shop or in the field.

- Configuration Groups
- Monitoring Deployment
- Deploying Endpoints
- Managing the Meter Change Out Process

TS2 Daily System Monitoring

Pre-requisites: None

Class Length: 150-180 Minutes **Credits:** 6 **Fee:** $300

Command Center provides a variety of dashboard, reports, and graphical displays to assist in the monitoring of the network. In this session, participants will learn the day to day activities necessary for managing their system.

Audience: AMI System Administrator, Network Administrator, Metering and personnel involved in troubleshooting the system both in the office and in the field.

- Monitoring the AMI Dashboard
- Understanding the Meter History Viewer
- Utilizing the Log Viewer
- Using Status Groups

PLC Command Center Reports

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

Command Center provides a variety of reports that can be used to monitor and troubleshoot the PLC system, as well as reports used by the utilities customer service personnel. In this session, participants will become familiar with how to generate and analyze these reports. The session will cover both TS1 and TS2.

Audience: AMI System Administrator, Network administrator, Engineering, Billing and Customer Service personnel.

- Optics Reports
- Meter Exceptions Report
- Downstream Performance
- Service History Report
- Meter Change Out Report
- Billing Progress Report
- Endpoint Audit
- Signal Quality Reports
- Interruption Reports
- Daily Reads Status Report
- Outage Tracker
- Transaction Log

PLC Command Center Billing

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

Command Center provides billing personnel with tools needed to extract readings information for billing purposes. In this session, participants will learn how to setup billing extracts, as well as learn the reports provided to verify readings availability. This session covers TS1, TS2 and PLX.

Audience: AMI System Administrator and Billing personnel.

- Working with Billing Cycles
- Scheduling Data Extract
- Final Readings (TS2 and PLX)
- Data Extract Setup
- Utilizing the Billing Progress Report

TS2 Implementing Demand Billing

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

The purpose of the demand reset is to capture peak demand values and the times at which those values were recorded since the last time the reset procedure was executed. Command Center may be used to scheduled demand resets. In this session, participants will learn how to configure endpoints for demand reset and monitor demand reset success.

Audience: AMI System Administrator, Billing and Metering personnel.

- Setting up the Demand Billing Configuration
- Demand Billing Scheduled Reads
- Configuring Endpoints for Demand Billing
- Demand Billing Impact to Data Extract

TS2 Introduction to Interval Data

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

The TS2 technology offers the collection of hourly interval data. In this session, participants will learn the requirements for setup of interval data, how to configure endpoints, and how to monitor incoming data.

Audience: AMI System Administrator, Engineering and Billing personnel.

- Understanding the Basics of Interval Data
- Deployment Considerations
- Viewing Interval Data in Command Center
- Infrastructure Requirements
- Setting Up Command Center

TS2 Implementing Load Control (LCS)

Pre-requisites: None

Class Length: 90-120 Minutes **Credits:** 4 **Fee:** $200

The Landis+Gyr Load Control Switch (LCS) allows TS2 Command Center to selectively control appliances such as air conditioners and water heaters to ease the load on a utility's power system during peak demand times. In this session participants will get an overview of how to deploy Load Control endpoints, as well as learn how to set up configuration of Load Control using TS2 Command Center.

Audience: AMI Administrator as well as Billing and Metering personnel.

- Overview of Load Control
- Schedule Sets
- Configuration Groups
- Load Control Schedules
- Seasonal Schedules
- Load Control Reports