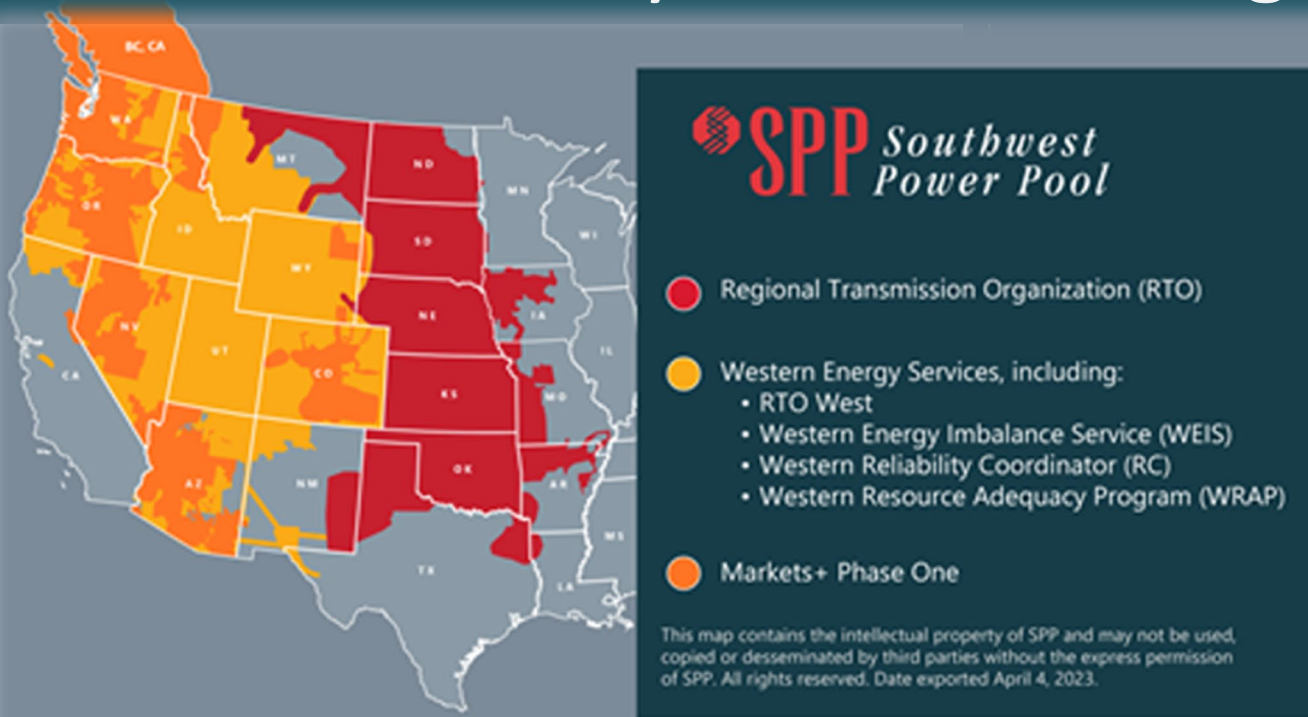




Stakeholder Training

2024

# Stakeholder Training - 2024 Reliability Course Catalog



Stakeholder Training Department

Southwest Power Pool

1/1/2024

## Introduction

The SPP Stakeholder Training - Reliability 2024 Course Training Catalog provides course descriptions and training sessions scheduled for the 2024 calendar year. Registrations for these classes will open at **1400 (CPT) on Tuesday, November 16, 2023**, in the [SPP Learning Center \(LMS\)](#). Once registration opens, sessions will be displayed on, and can be requested from, the SPP Learning Center Session Calendar.

**Note:** You must have an account in the SPP Learning Center in order to register. Links to create an account can be found on the sign-in page.

This document is owned and maintained by the SPP Stakeholder Training department. It is a living document and will be updated as new courses and materials become available. Please email questions or comments to Stakeholder Training [training@spp.org](mailto:training@spp.org).

This document contains a complete schedule of SPP Stakeholder Training's reliability educational offerings for 2024. You can read a description of each course by clicking the links under [Schedule of Classes](#). Registration information through the SPP Learning Center is also included.

## Types of Training



- **On-Demand** – On-demand are computer-based modules available through the [SPP Learning Center](#). These courses are self-paced and available at any time at the discretion of the learner.
- **Learning Burst** – Learning Bursts are short, targeted segments of on-demand training that deliver basic and valuable knowledge in short “bursts” or sessions of 10 minutes or less. Learning Bursts do not offer CEHs.

SPP currently offers two types of Instructor-Led training.

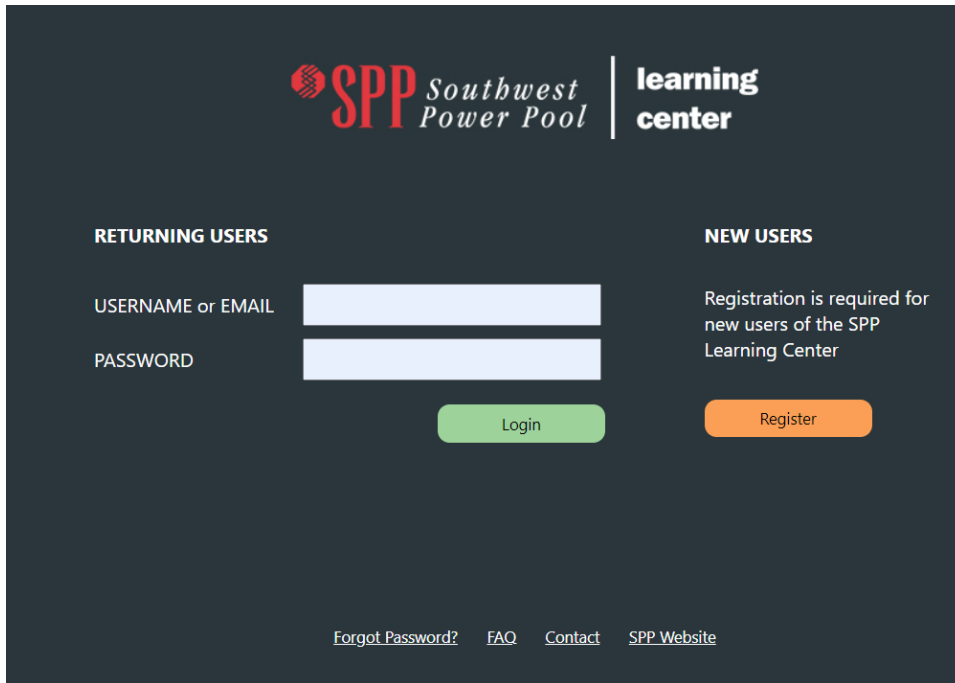


- Instructor-Led Training (ILT)
  - Live training delivered face-to-face in a real-time environment
- Virtual Instructor-Led Training (VILT)
  - Live interactive training delivered via the internet and sometimes referred to as a Net Conference or Webinar.

## SPP Learning Center Registration Information

Learners will use the SPP Learning Center (LMS) to search and register for all training.

First-time visitors to the SPP Learning Center must create an account to gain access.



The screenshot shows the SPP Learning Center login and registration interface. At the top left is the SPP Southwest Power Pool logo, and at the top right is the 'learning center' logo. The page is divided into two main sections: 'RETURNING USERS' and 'NEW USERS'. Under 'RETURNING USERS', there are two input fields: 'USERNAME or EMAIL' and 'PASSWORD', followed by a green 'Login' button. Under 'NEW USERS', there is a text box stating 'Registration is required for new users of the SPP Learning Center' and an orange 'Register' button. At the bottom of the page, there are links for 'Forgot Password?', 'FAQ', 'Contact', and 'SPP Website'.

### **Creating an Account in the SPP Learning Center**

- Go to [spp.csod.com](http://spp.csod.com) and click the appropriate link:
  - Member Registration - Employees of [SPP Member companies](#)
    - (For a list of SPP Member companies, go to the Member page of [SPP.org](http://SPP.org).)
  - Non-Member Registration - Employees of non-member companies (this includes Market Participants, Registered Entities who are not SPP Members, etc.)
    - Once you have created an account, log into the SPP Learning Center.

Contact [LMS@spp.org](mailto:LMS@spp.org) with any questions.

## Schedule of Classes

Select each title to view the course description, NERC Continuing Education hours, course fees, contact information and dates offered.

### ***e-Learning Courses (with CEHs)***

[Outage Coordination – CROW](#)

[Control Performance Standards \(CPS\)](#)

[System Restoration Principles](#)

[Transmission Loading Relief \(TLR\)](#)

[Voltage Control and System Stability](#)

[Operator Awareness](#)

[Power System Protection: Curriculum](#)

[Reserve Sharing System \(RSS\)](#)

[SPP BA EOP Conservative Operations and Capacity and Energy Emergencies](#)

[Natural Gas Fundamentals](#)

[Minimum Generation and Load Shed](#)

[Event Reporting and Analysis](#)

[Reliability Communication Tool](#)

[Renewable Energy Curriculum](#)

[Data Maze](#)

### ***e-Learning (without CEHs):***

[Adventures in Training - Subject Matter](#)

[Expert \(SME\) Training](#)

[SME – Learning the R.O.P.E.S](#)

### **Learning Bursts (no CEHs):**

[What is ACE?](#)

[How to Calculate ACE](#)



## Instructor-led (ILT) and Virtual Instructor-led (VILT) Courses

### January

[30 – Restoration Principles VILT](#)

[30-31 Power System Restoration Drill](#)

### February

[5 – Restoration Principles VILT](#)

[6-7 Power System Restoration Drill](#)

[12 – Restoration Principles VILT](#)

[13-14 Power System Restoration Drill](#)

[20 – Restoration Principles VILT](#)

[21-22 Power System Restoration Drill](#)

[26 – Restoration Principles VILT](#)

[27-28 Power System Restoration Drill](#)

### March

[4 – Restoration Principles VILT](#)

[5-6 Power System Restoration Drill](#)

### April

[9-11 System Operations Conference \(Kansas City, Mo\)](#)

[22-23 Lighting the Way \(Little Rock, AR\)](#)

[23-25 Blurring the Lines \(Little Rock, AR\)](#)

### May

[7-9 System Operations Conference \(Westminster, CO\)](#)

### June

[4-6 System Operations Conference \(Oklahoma City, OK\)](#)

[24-25 Lighting the Way \(Kansas City, MO\)](#)

[25-27 Blurring the Lines \(Kansas City, MO\)](#)

### August

[6-8 Train-the-Trainer \(Little Rock, AR\)](#)

[20-22 System Operations Conference \(Omaha, NE\)](#)

### September

[3 Communications VILT](#)

[4 Congestion Management VILT](#)

[4 Unit Commitment VILT](#)

[5 Balancing Authority Emergencies VILT](#)

[10 Communications VILT](#)

[11 Congestion Management VILT](#)

[11 Unit Commitment VILT](#)

[12 Balancing Authority Emergencies VILT](#)

[17-19 System Operations Conference \(Albuquerque, NM\)](#)

[24 Communications VILT](#)

[25 Congestion Management VILT](#)

[25 Unit Commitment VILT](#)

[26 Balancing Authority Emergencies VILT](#)



**October**

[1 Communications VILT](#)

[2 Congestion Management VILT](#)

[2 Unit Commitment VILT](#)

[3 Balancing Authority Emergencies VILT](#)

[15-17 System Operations Conference \(Phoenix, AZ\)](#)

[29 Communications VILT](#)

[29 Congestion Management VILT](#)

[30 Unit Commitment VILT](#)

[31 Balancing Authority Emergencies VILT](#)

**November**

[11-12 Lighting the Way \(Denver, CO\)](#)

[12-14 Blurring the Lines \(Denver, CO\)](#)

**December**

## Course Descriptions

### SPP System Operations Conference

SPP will host six System Operations Conferences (SOCs) designed to provide participants valuable training on current and relevant topics, NERC continuing education hours, and opportunities to collaborate and network with others who serve in system operations.

Members of Southwest Power Pool, Inc. may participate in SOCs at no additional cost. Non-members wishing to participate will be charged according to SPP's Stakeholder Training pricing structure. This is an intermediate level training event designed primarily for persons who have some previous experience in system operations.

#### **Course Fee for Non-members: System Operations Conference - SOC (20 hours)**

(20 hours) \$1,500/per person

All payments are made through the SPP Learning Center. SPP does not invoice, but accepts all major credit cards for payment.

#### **Other Details**

**NERC ILA ID: SPP\_025\_SOC\_2024** (*Pending approval*) is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and Southwest Power Pool adheres to NERC Continuing Education Program Criteria.

#### **Estimated NERC CE Hours Breakdown:**

Totals: 20 Operating Topics hrs. *Partial Credit **may** be awarded per day or session. Complete CE hour break down will be available in the SPP Learning Center after ILA approval.*

**Other Details:** Agenda and other details TBA.

**Event Contact:** [Jennifer Farley](#) – 501-350-8120

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#### **2024 Dates and Locations:**

April 9-11 Kansas City, MO

August 20-22 Omaha, NE

May 7-9 Westminster, CO

September 17-19 Albuquerque, NM

June 4-6 Oklahoma City, OK

October 15-17 Phoenix, AZ

**Please Note: SPP will have limited designated hotel room blocks. You will be responsible for choosing and securing your hotel room for each conference.**

## Power System Restoration Drill

SPP's Power System Restoration Drills are designed to provide participating entities an opportunity to practice the implementation of their system restoration plans including the assessment, coordination and communication necessary for power system restoration. Drills will be conducted virtually, enabling entities to participate from their own facility. SPP's Dispatcher Training Simulator (DTS) will be available through remote access. The drills will emphasize the application of NERC Standards, SPP Criteria and industry principles and guidelines related to system restoration. Facilitators, or their proxy, must be registered and present to assess each participant's performance in the simulation activity.

This is an intermediate level training session that will require participants have an existing knowledge of NERC Standards, SPP Criteria and industry principles and guidelines related to power system restoration. **It is highly suggested that learners who are participating in this drill attend the Restoration Principles virtual instructor-led training (VILT) prior to the drill. You will need to register for the VILT separately.**

Members of Southwest Power Pool, Inc. may participate in stakeholder training events at no additional cost. Non-members wishing to participate in SPP training events will be charged according to SPP's Stakeholder Training pricing structure.

### Course Fee for Non-members:

Restoration Drill - (16 hours) – \$1,100/entity

All payments are made through the SPP Learning Center. SPP does not invoice, but accepts all major credit cards for payment.

### Other Details

**NERC ILA Number: SPP\_025\_PSRD\_2024** (*Pending approval*). NERC ILA is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and that Southwest Power Pool adheres to NERC Continuing Education Program Criteria.



**Estimated NERC CE Hour Breakdown:**

Totals: 16 Op. Topic hrs. 16 Standards hrs. 16 Sim hrs.

*Partial Credit available – Partial credit will be awarded in whole-day increments only.*

Day 1 – 8 Op Topics hrs. 8 Standards hrs. 8 Sim hrs.

Day 2 - 8 Op Topics hrs. 8 Standards hrs. 8 Sim hrs.

**Event Contact:** [Kelly Blackmer](#)– 501-482-2463

[Return to schedule](#)

**Drill 2024 Dates:**

January 30-31

February 13-14

February 27-28

February 6-7

February 21-22

March 5-6

## Lighting the Way – Integrated Market Fundamentals

Are you a new Market Participant (MP) or employee needing a baseline understanding of the Integrated Marketplace fundamentals, or an existing MP or employee needing a refresher? If so, join us for our popular Lighting the Way: Integrated Marketplace Fundamentals course.

Through engaging activities and discussion, we will address concepts such as:

What is the Integrated Marketplace?

How do the various components of the Integrated Marketplace work together?

What are some of the Integrated Marketplace's key features?

Note: This is an introductory course. It does not provide the in-depth training included in our many of our Computer-Based Training (CBT) courses available in the SPP Learning Center.

Course Fee for Non-members: (12 hours/10 CE hours) – \$750/per person

All payments are made through the SPP Learning Center (LMS). SPP does not invoice, but accepts all major credit cards for payment.

### Other Details

**NERC ILA ID: SPP\_025\_LTW\_2024** (*Pending approval*) is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and Southwest Power Pool adheres to NERC Continuing Education Program Criteria.

### **Estimated NERC CE Hours Breakdown:**

Totals: 8 Operating Topics hrs.

Training material and instructions will be provided to registered participants once registration has closed. Sessions are 0800 – 1700 Day 1 and 0800 – 1200 Day 2.

**Event Contact:** [Becky Gifford](#) – 501-614-3390

[Return to schedule](#)

### **2024 Delivery Dates:**

April 22-23 ( Little Rock, AR)    June 24 – 25 (Kansas City, MO)    November 11-12 (Westminster, CO)

## Blurring the Lines: Markets and Reliability

SPP's 2024 Blurring the Lines – Markets and Reliability course will be a two-day instructor-led course focused on identifying and evaluating BES reliability-related tasks supported by SPP's Integrated Marketplace. During this course, participants will learn which marketplace processes help SPP comply with various industry standards. They will also learn how the marketplace performs specific reliability tasks, such as unit commitment, regulation scheduling, contingency reserve deployment, and congestion management.

**Members of Southwest Power Pool, Inc. may participate in stakeholder training events at no additional cost. Non-members wishing to participate in SPP training events will be charged according to SPP's Stakeholder Training pricing structure.**

Course Fee for Non-members: (16 hours) – \$1,200/per person

All payments are made through the SPP Learning Center (LMS). SPP does not invoice, but accepts all major credit cards for payment.

### **Other Details**

**NERC ILA ID: SPP\_025\_BLMR\_2024** (*Pending approval*) is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and Southwest Power Pool adheres to NERC Continuing Education Program Criteria.

### **Estimated NERC CE Hours Breakdown:**

Totals: 16 Operating Topics hrs.

Training material and instructions will be provided to registered participants once registration has closed. Sessions are 0800 – 1700 Day 1 and 0800 – 1700 Day 2.

**Event Contact:** [Becky Gifford](#) – 501-614-3390

[Return to schedule](#)

### **2024 Delivery Dates:**

April 24-25 ( Little Rock, AR)    June 26-27 (Kansas City, MO)    November 13-14 (Westminster, CO)

## Virtual Instructor-Led Training (VILT)



## Virtual Instructor-Led Training (VILT) – Restoration Principles

This session is a four-hour Virtual Instructor Led Training (VILT) course that focuses on system restoration standards, processes, and guidelines. Participants will first explore the system restoration requirements outlined in NERC Standards EOP-005 and EOP-006. Participants will then review the roles, responsibilities, and processes outlined in SPP’s Reliability Coordinator Restoration Plan, including synchronization of energized islands and returning control from the Transmission Operator back to the Balancing Authority.

**Anyone planning to participate in an SPP System Restoration Drill is strongly encouraged to take, or retake, this course prior to participating in a drill.**

### Course Fee for Non-members:

VILT (4 hours) - \$260/per person or \$65/Continuing Education Hour

All payments are made through SPP’s Learning Management System (LMS). SPP does not invoice but accepts all major credit cards for payment.

### Other Details

NERC ILA ID: **SPP\_025\_RP\_VILT\_2024** (*Pending approval*) is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and Southwest Power Pool adheres to NERC Continuing Education Program Criteria.

### Estimated NERC CE Hours Breakdown:

Totals: 4 Operating Topics hrs. 4 Standards hrs. 1 Simulation hr.

VILT training material and instructions will be provided to registered participants once registration has closed. Sessions are 1300-1700 (CPT).

**Event Contact:** Kelly Blackmer– 501-614-3253

[Return to schedule](#)

### 2024 Delivery Dates:

January 29	February 12	February 26
February 5	February 20	March 4

## Virtual Instructor-Led Training (VILT) – Communications

This session is a four-hour Virtual Instructor Led Training (VILT) course that focuses on three areas:

- 1) The communication requirements spelled out in NERC’s COM-002 standard
- 2) SPP’s Communication Protocol for both our Eastern Interconnection and Western Interconnection RC footprints
- 3) The Reliability Communication (R-COMM) tool utilized to communicate in the real-time operations environment

The session will explore communications pitfalls, provide best-practice suggestions, and provide exposure to and familiarity with the R-COMM tool.

### Course Fee for Non-members:

VILT (4 hours) - \$260/per person or \$65/Continuing Education Hour

All payments are made through SPP’s Learning Management System (LMS). SPP does not invoice but accepts all major credit cards for payment.

### Other Details

**NERC ILA ID: SPP\_025\_COM\_VILT\_2024** (*Pending approval*) is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and Southwest Power Pool adheres to NERC Continuing Education Program Criteria.

### Estimated NERC CE Hours Breakdown:

Totals: 4 Operating Topics hrs.

VILT training material and instructions will be provided to registered participants once registration has closed. Sessions are 1300-1700 (CPT).

**Event Contact:** Mary Muldrow– 501-614-3556

[Return to schedule](#)

### 2024 Delivery Dates:

September 3	September 24	October 8
September 10	October 1	October 29

## Virtual Instructor-Led Training (VILT) – Congestion Management

This session is a four-hour Virtual Instructor Led Training (VILT) course that outlines the tools and strategies SPP employs in our Eastern Interconnection RC footprint to monitor for system congestion and to mitigate it when it occurs. This course will review System Operating Limits and Interconnection Reliability Operating Limits, how they are derived, and which entities are involved in their development. The course will also introduce learners to “Flowgates” and explore how they are used to monitor system congestion. Finally, the course will detail tools used by the SPP RC to mitigate system congestion, including Congestion Management Events, Transmission Loading Relief, System Reconfiguration, Firm Load Shed, and others.

### Course Fee for Non-members:

VILT (4 hours) - \$260/per person or \$65/Continuing Education Hour

All payments are made through SPP’s Learning Management System (LMS). SPP does not invoice but accepts all major credit cards for payment.

### Other Details

**NERC ILA ID: SPP\_025\_CM\_VILT\_2024** (*Pending approval*) is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and Southwest Power Pool adheres to NERC Continuing Education Program Criteria.

### Estimated NERC CE Hours Breakdown:

Totals: 4 Operating Topics hrs.

VILT training material and instructions will be provided to registered participants once registration has closed. Sessions are 0800-1200 (CPT).

**Event Contact:** John Gunter– 501-482-2526

[Return to schedule](#)

### 2024 Delivery Dates:

September 4	September 25	October 9
September 11	October 2	October 30

## Virtual Instructor-Led Training (VILT) – Balancing Authority Emergency Operations

This session is a four-hour Virtual Instructor Led Training (VILT) course that focuses on NERC standard EOP-011 and the requirement it places on Balancing Authorities to develop, maintain, and implement Operating Plans to mitigate Capacity Emergencies and Energy Emergencies. Learners will explore SPP’s Balancing Authority Emergency Operating Plan, the emergency conditions detailed in the plan, and SPP’s response to each condition, including Conservative Operations, Minimum Generation Conditions, and Capacity Emergencies. Learners will also review Attachment 1 of the EOP-011 standard and the roles, responsibilities, and characteristics identified for Energy Emergency Alerts.

### Course Fee for Non-members:

VILT (4 hours) - \$260/per person or \$65/Continuing Education Hour

All payments are made through SPP’s Learning Management System (LMS). SPP does not invoice but accepts all major credit cards for payment.

### Other Details

NERC ILA ID: **SPP\_025\_BAEO\_VILT\_2024** (*Pending approval*) is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and Southwest Power Pool adheres to NERC Continuing Education Program Criteria.

### Estimated NERC CE Hours Breakdown:

Totals: 4 Operating Topics hrs.

VILT training material and instructions will be provided to registered participants once registration has closed. Sessions are 0800 – 1200 (CPT).

**Event Contact:** John Gunter 501-482-2526

[Return to schedule](#)

### 2024 Delivery Dates:

September 5	September 26	October 10
September 12	October 3	October 31



## Virtual Instructor-Led Training (VILT) –Unit Commitment

This session is a four-hour Virtual Instructor Led Training (VILT) course that will introduce learners to SPP’s processes for committing generation resources to meet the needs of our footprint. Participants will first learn SPP’s Reliability Unit Commitment (RUC) process for committing resources beginning with the Day-Ahead RUC process and continuing all the way through the Short-Term RUC process. Learners will then explore SPP’s process for manually committing resources as needed to address reliability-related concerns that arise.

Course Fee for Non-members:

VILT (4 hours) - \$260/per person or \$65/Continuing Education Hour

All payments are made through SPP’s Learning Management System (LMS). SPP does not invoice but accepts all major credit cards for payment.

### Other Details

**NERC ILA ID: SPP\_025\_Unit Commitment\_VILT\_2024** (*Pending approval*) is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and Southwest Power Pool adheres to NERC Continuing Education Program Criteria.

### **Estimated NERC CE Hours Breakdown:**

Totals: 4 Operating Topics hrs.

VILT training material and instructions will be provided to registered participants once registration has closed. Sessions are 1300 – 1700 (CPT).

**Event Contact:** Becky Gifford – 501-614-3390

[Return to schedule](#)

### **2024 Delivery Dates:**

September 4  
September 11

September 25  
October 2

October 9  
October 30



## eLearning – Data Maze

Real-time operations, and even day-ahead planning, are all built on the exchange of data. To ensure reliability, we have to have a platform in place and define what data is being sent back and forth. In this course, participants will learn the operational data necessary to perform real-time operations, where this data originates, and the necessary applications utilized for data exchange. Applications covered in this eLearning module include, but are not limited to Inter-Control Center Communications Protocol (ICCP), Real-Time Generation (RTGEN), Real-Time Network (State Estimator), Voltage and Transient Stability Analysis Tools (VSAT/TSAT), Market Operating System functions, and forecast applications. In addition, participants will learn how operational data is used, as well as how it is protected.

This is intermediate level training.

Members of Southwest Power Pool, Inc. may request self-study at no additional cost. Non-members wishing to take SPP training events will be charged according to SPP's Stakeholder Training pricing structure.

### **Course Fee for Non-members:**

\$97.50 /per person or \$65/Continuing Education Hour

All payments are made through SPP's Learning Management System. SPP does not invoice but accepts all major credit cards for payment.

### **Other Details**

**NERC ILA ID: SPP\_025\_DM\_SS\_2023** (*Pending approval*) is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and Southwest Power Pool adheres to NERC Continuing Education Program Criteria.

### **Estimated NERC CE Hours Breakdown:**

Totals: 1.5 Operating Topics hrs. 1 Standards hrs.

**Event Contact:** [Becky Gifford](#)– 501-614-3390

[Return to schedule](#)

Search the SPP Learning Center for the term “data”, “maze” for more information and for registration options.

## **eLearning - Event Reporting and Analysis**

This e-Learning module reviews NERC's and SPP's Event Analysis Process. Participants will be able to state the benefits and procedures of these two event analysis processes when reporting Bulk Electric System (BES) events. The module also reviews NERC Standard EOP-004 reporting requirements as well as identifies reportable events. Additionally, the participants will identify necessary reporting forms, EOP-004 Attachment 2 Event Reporting Form and the Department of Energy OE-417 form.

This is intermediate level training.

Members of Southwest Power Pool, Inc. may request self-study at no additional cost. Non-members wishing to take SPP training events will be charged according to SPP's Stakeholder Training pricing structure.

### **Course Fee for Non-members:**

\$97.50 /per person or \$65/Continuing Education Hour

All payments are made through SPP's Learning Management System. SPP does not invoice but accepts all major credit cards for payment.

### **Other Details**

**NERC ILA ID: SPP\_025\_ERA\_SS\_2022** (*Pending approval*) is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and Southwest Power Pool adheres to NERC Continuing Education Program Criteria.

### **Estimated NERC CE Hours Breakdown:**

Totals: 1.5 Operating Topics hrs. 1 Standards hrs.

**Event Contact:** [Jennifer Farley](#)– 501-688-8398

[Return to schedule](#)

Search the SPP Learning Center for the term “events”, “analysis”, or “reporting” for more information and for registration options.

## eLearning - Minimum Generation and Load Shed

This e-Learning module explores what SPP defines as Minimum Generation conditions, as well as general load shed principles. The module begins by defining Minimum Generation according to SPP's Balancing Authority Emergency Operating Plan, identifying conditions that could lead to Minimum Generation conditions, and stating actions SPP may take in response to Minimum Generation conditions. Next, the module explores fundamentals principles of load shed, NERC standards related to load shed, triggers that may lead to load shed conditions, and the facilitation of load shed.

This is intermediate level training.

Members of Southwest Power Pool, Inc. may request self-study at no additional cost. Non-members wishing to take SPP training events will be charged according to SPP's Stakeholder Training pricing structure.

### **Course Fee for Non-members:**

\$65/per person or \$65/Continuing Education Hour

All payments are made through SPP's Learning Management System (LMS). SPP does not invoice but accepts all major credit cards for payment.

### **Other Details**

**NERC ILA ID: SPP\_025\_MGLS\_SS\_2022** is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and Southwest Power Pool adheres to NERC Continuing Education Program Criteria.

### **Estimated NERC CE Hours Breakdown:**

*Totals: 1 Operating Topics hrs. 1 Standards hrs.*

**Event Contact:** [John Gunter](#)– 501-688-2526

[Return to schedule](#)

Search the SPP Learning Center for the term “load shed”, “min gen”, or “minimum generation” for more information and for registration options.

## **eLearning - Reliability Communication Tool**

This e-Learning session reviews the features and functions of SPP's Reliability Communication Tool (R-COMM). Participants will be able to identify R-COMM's primary features and explain its role in two-party, multidirectional, near real-time notifications.

This is intermediate level training.

Members of Southwest Power Pool, Inc. may request self-study at no additional cost. Non-members wishing to take SPP training events will be charged according to SPP's Stakeholder Training pricing structure.

### **Course Fee for Non-members:**

\$97.50/per person or \$65/Continuing Education Hour

All payments are made through SPP's Learning Management System (LMS). SPP does not invoice but accepts all major credit cards for payment.

### **Other Details**

**NERC ILA ID: SPP\_025\_RCT\_SS\_2022** (*Pending approval*) is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and Southwest Power Pool adheres to NERC Continuing Education Program Criteria.

### **Estimated NERC CE Hours Breakdown:**

Totals: *1.5 Operating Topics hrs. 1 Standards hrs.*

[Return to schedule](#)

Search the SPP Learning Center for the term "R-Comm", "Reliability Communication Tool" for more information and for registration options.

## **eLearning - SPP BA EOP Conservative Operations and Capacity and Energy Emergencies**

Being prepared to handle the Bulk Electric System (BES) during emergency operations is a CRITICAL skill for system operators and other key personnel. This self-study course will focus on **Capacity and Energy Emergencies (CEE)** as well as **Conservative Operations**.

This is intermediate level training.

The participants will identify how the SPP Balancing Authority Emergency Operating Plan and NERC's EOP standards identify and describe actions to be taken for mitigating these emergency situations.

Members of Southwest Power Pool, Inc. may request self-study at no additional cost. Non-members wishing to take SPP training events will be charged according to SPP's Stakeholder Training pricing structure.

### **Course Fee for Non-members:**

\$65/per person or \$65/Continuing Education Hour

All payments will be made through the SPP Learning Center. SPP does not invoice but accepts all major credit cards for payment.

### **Other Details**

**NERC ILA ID: SPP\_025\_BAEOP\_CO\_CEE\_SS\_2019** (*Pending renewal approval*) is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and Southwest Power Pool adheres to NERC Continuing Education Program Criteria.

### **NERC CE Hours Breakdown:**

Totals: 1 Operating Topics hrs. 1 Standards hrs.

Search the SPP Learning Center for the term "SPP BA EOP" or "Reliability Self-Study" for more information and for registrations options.

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## **eLearning - Outage Coordination (CROW)**

SPP uses the CROW Outage Scheduler to communicate and track planned and emergency outages of transmission elements and generating units. The Outage-Coordination – CROW Self-Study will describe the importance and timeliness of outage coordination and reporting. An emphasis will be placed on SPP RC Outage Coordination Methodology and the CROW outage submission tool.

This is intermediate level training.

Members of Southwest Power Pool, Inc. may request self-study at no additional cost. Non-members wishing to take SPP training events will be charged according to SPP's Stakeholder Training pricing structure.

### **Course Fee for Non-members:**

\$97.50/per person or \$65/Continuing Education Hour

All payments will be made through the SPP Learning Center. SPP does not invoice but accepts all major credit cards for payment.

### **Other Details**

**NERC ILA ID: SPP\_025\_SS\_Outage Coordination\_CROW\_2023** (*Pending renewal approval*) is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and Southwest Power Pool adheres to NERC Continuing Education Program Criteria.

### **NERC CE Hours Breakdown:**

Totals: 1.5 Operating Topics hrs. 1.5 Standards hrs.

Search the SPP Learning Center for the term "CROW" or "Reliability Self-Study" for more information and for registrations options.

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## **eLearning - Control Performance Standards (CPS)**

This self-study is designed to ensure participants develop an understanding of the NERC Real Power Balancing Control Performance Standards, Control Performance Standard 1 (CPS1) and Balancing Authority ACE Limit (BAAL); and the Disturbance Control Performance Standard (DCS). Applicable concepts, such as ACE and frequency will also be discussed, as well as expectations for compliance with each of these standards.

Those taking this self-study should have a clear understanding of the ACE calculation. For a refresher, we suggest you take the Learning Bursts; What is ACE? and How to Calculate ACE.

This is intermediate level training.

Members of Southwest Power Pool, Inc. may request self-study at no additional cost. Non-members wishing to take SPP training events will be charged according to SPP's Stakeholder Training pricing structure.

### **Course Fee for Non-members:**

\$65/per person or \$65/person per Continuing Education Hour

All payments will be made through the SPP Learning Center. SPP does not invoice but accepts all major credit cards for payment.

### **Other Details**

**NERC ILA ID: SPP\_025\_CPS\_SS\_2016** (*Pending renewal approval*) is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and Southwest Power Pool adheres to NERC Continuing Education Program Criteria.

### **NERC CE Hour Breakdown:**

Totals: 1 Operating Topics hr. 1 Standards hr.

Search the SPP Learning Center for the term "CPS" or "Reliability Self-Study" for more information and for registration options.

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## **eLearning - System Restoration Principles (SRP)**

This self-study is designed to help participants develop an understanding of system restoration principles, as well as NERC Standards and SPP Criteria related to system restoration. Topics covered in this self-study include, but are not limited to, acceptable frequency and voltage limits, load restoration guidelines, and criteria for interconnection.

***We strongly recommend anyone planning to participate in a system restoration drill first complete this self-study.***

This is intermediate level training.

Members of Southwest Power Pool, Inc. may request self-study at no additional cost. Non-members wishing to take SPP training events will be charged according to SPP's Stakeholder Training pricing structure.

### **Course Fee for Non-members:**

\$65/per person or \$65/person per Continuing Education Hour

All payments will be made through the SPP Learning Center. SPP does not invoice but accepts all major credit cards for payment.

### **Other Details**

**NERC ILA ID: SPP\_025\_SRP\_SS\_2015** (*Pending renewal approval*) is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and Southwest Power Pool adheres to NERC Continuing Education Program Criteria.

### **NERC CE Hours Breakdown:**

Totals: 1 Operating Topics hr. 1 Standards hr.

Search the SPP Learning Center for the term "System Restoration" or "Self-Study" for more information and for registration options.

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## **eLearning - Transmission Loading Relief (TLR)**

This self-study is designed to ensure participants develop an understanding of flowgates, distribution factors and the TLR process. The various levels of TLR will be described along with considerations when selecting a particular TLR level, curtailment amounts, and Network and Native Load (NNL) relief. Applicable NERC and SPP requirements will also be reviewed.

This is intermediate level training.

Members of Southwest Power Pool, Inc. may request self-study at no additional cost. Non-members wishing to take SPP training events will be charged according to SPP's Stakeholder Training pricing structure.

### **Course Fee for Non-members:**

\$65/per person or \$65/person per Continuing Education Hour

All payments will be made through the SPP Learning Center. SPP does not invoice but accepts all major credit cards for payment.

### **Other Details**

**NERC ILA ID: SPP\_025\_SS\_TLR\_2015** (*Pending renewal approval*) is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and Southwest Power Pool adheres to NERC Continuing Education Program Criteria.

### **NERC CE Hour Breakdown:**

Totals: 1 Operating Topics hr. 1 Standards hr.

Search the SPP Learning Center for the term "TLR" or "Reliability Self-Study" for more information and for registration options.

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## **eLearning - Voltage Control and System Stability (VCSS)**

This self-study explores the basic fundamentals of voltage control, acceptable voltage limits under normal, contingency, and restoration conditions, and reactive devices used to manage voltage on the Bulk Electric System.

This is intermediate level training.

Members of Southwest Power Pool, Inc. may request self-study at no additional cost. Non-members wishing to take SPP training events will be charged according to SPP's Stakeholder Training pricing structure.

### **Course Fee for Non-members:**

\$65/per person or \$65/person per Continuing Education Hour

All payments will be made through the SPP Learning Center. SPP does not invoice but accepts all major credit cards for payment.

### **Other Details**

**NERC ILA ID: SPP\_025\_VCSS\_SS\_2017***(Pending renewal approval)* is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and Southwest Power Pool adheres to NERC Continuing Education Program Criteria.

### **NERC CE Hour Breakdown:**

Totals: 1 Operating Topics hr.; 1 Standards hr.

Search the SPP Learning Center for the term "VCSS" or "Reliability Self-Study" for more information and for registration options.

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## **eLearning - Operator Awareness (OA)**

This self-study introduces the components of Operator Situational Awareness and identifies the importance of the use of operator situational awareness in recognizing reliability issues on the system. The self-study will also identify Human Performance Tools that can promote Operator Awareness and can be used to help respond to contingencies.

Members of Southwest Power Pool, Inc. may request self-study at no additional cost. Non-members wishing to take SPP training events will be charged according to SPP's Stakeholder Training pricing structure.

### **Course Fee for Non-members:**

\$65/per person or \$65/person per Continuing Education Hour

All payments will be made through the SPP Learning Center. SPP does not invoice but accepts all major credit cards for payment.

### **Other Details**

**NERC ILA ID: SPP\_025\_OA\_SS\_2017** (*Pending renewal approval*) is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and Southwest Power Pool adheres to NERC Continuing Education Program Criteria.

### **NERC CE Hour Breakdown:**

Totals: 1 Operating Topics hr.

Search the SPP Learning Center for the term "OA" or "Reliability Self-Study" for more information and for registration options.

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## eLearning - Power System Protection Curriculum

This self-study course will review the fundamental purpose of system protection and the basic components that make up a protection system. Participants will review a variety of relay types, characteristics, and applications such as differential relays, distance relays, instantaneous and time-delay relays, and directionality.

Members of Southwest Power Pool, Inc. may request self-study at no additional cost. Non-members wishing to take SPP training events will be charged according to SPP's Stakeholder Training pricing structure.

### **Course Fee for Non-members:**

\$97.50/per person or \$65/Continuing Education Hour

All payments will be made through the SPP Learning Center. SPP does not invoice but accepts all major credit cards for payment.

### **Other Details**

**NERC ILA ID: SPP\_025\_PSP Curriculum\_2020** (*Pending approval*) is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and Southwest Power Pool adheres to NERC Continuing Education Program Criteria.

### **NERC CE Hour Breakdown:**

Totals: 1.5 Operating Topics hrs. 1.5 Standard hrs.

Search the SPP Learning Center for the term "Protection" or "Reliability Self-Study" for more information and for registration options.

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## **eLearning - Reserve Sharing System (RSS)**

SPP uses the OATI Reserve Sharing System (RSS) tool to notify SPP's Reserve Sharing Group (RSG) when one of its members has suffered a sudden and unexpected loss of capacity. Reserves carried by RSG members will be proportionately distributed by the RSS for recovery of this loss.

This self-study e-Learning will discuss the allocation and distribution of reserves within the SPP RSG as well as other information available in the SPP RSS. By participation in self-check scenarios throughout the session, the participants will learn how to submit pertinent data and the outcome of different reserve sharing situations.

This is intermediate level training.

Members of Southwest Power Pool, Inc. may request self-study e-Learning at no additional cost. Non-members wishing to take SPP training events will be charged according to SPP's Stakeholder Training pricing structure.

### **Course Fee for Non-members:**

\$97.50/per person or \$65/Continuing Education Hour

All payments will be made through the SPP Learning Center. SPP does not invoice but accepts all major credit cards for payment.

### **Other Details**

**NERC ILA ID: SPP\_025\_RSS\_SS\_2016** (*Pending renewal approval*) is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and Southwest Power Pool adheres to NERC Continuing Education Program Criteria.

### **NERC CE Hours Breakdown:**

Totals: 1.5 Operating Topics hrs. 1.5 Standards hrs.

Search the SPP Learning Center for the term "RSS" or "Reliability Self-Study" for more information and registration.

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## **eLearning - Natural Gas Fundamentals**

This self-study provides an introduction to natural gas operations. Participants will learn the contents of the natural gas stream, what different elements are used for in the marketplace, the components of natural gas delivery system and gas industry terminology among other things.

This is intermediate level training.

### **Course Fee for Non-members:**

\$65/per person or \$65/person per Continuing Education Hour

All payments will be made through the SPP Learning Center. SPP does not invoice but accepts all major credit cards for payment.

### **Other Details**

**NERC ILA ID: SPP\_025 \_NGF\_SS\_2021** (pending ILA approval) is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and Southwest Power Pool adheres to NERC Continuing Education Program Criteria.

### **Estimated NERC CE Hours Breakdown:**

Totals: 1 Operating Topics hrs. 0 Standards hrs.

Search the SPP Learning Center for the term “Gas”, “Natural Gas”, or “Self-Study” for more information and for registration options.

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## **eLearning - Renewable Energy Curriculum**

Renewable energy is on the mind of everyone from the leaders of the United States to your next door neighbor. The Renewable Energy Curriculum provides you with foundational knowledge about Solar and Wind energy as well as the related Energy Storage Resource technologies that are commonly used within the United States. Take all three 50-minute modules and join the conversation.

### **Course Fee for Non-members:**

\$195/per person or \$65/person per Continuing Education Hour

All payments will be made through the SPP Learning Center. SPP does not invoice but accepts all major credit cards for payment.

### **Other Details**

**NERC ILA ID: SPP\_025\_RC\_SS\_2021** (pending ILA approval) is recognized by the North American Electric Reliability Corporation as an approved learning activity for which NERC CE hours can be awarded, and Southwest Power Pool adheres to NERC Continuing Education Program Criteria.

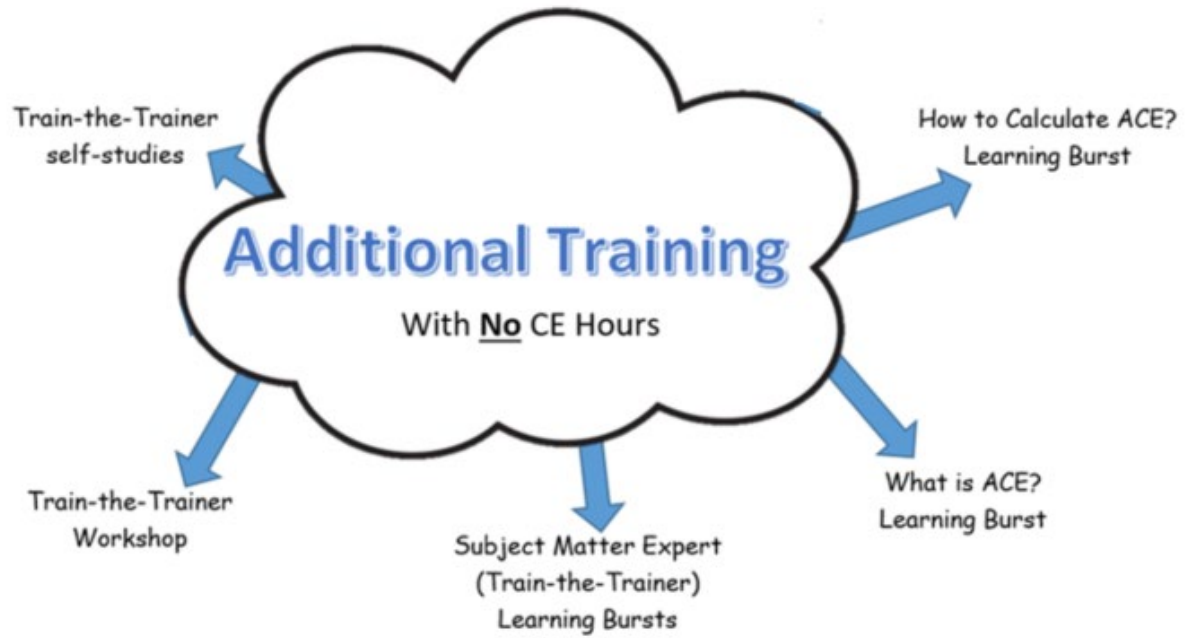
### **Estimated NERC CE Hours Breakdown:**

Totals: 3 Operating Topics hrs. 0 Standards hrs. 0 Simulation hrs.

Search the SPP Learning Center for the term “Wind”, “Solar”, or “Energy Storage” for more information and for registration options.

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## ADDITIONAL TRAINING – With NO CE Hours



## SPP Train-the-Trainer

Southwest Power Pool's Train-the-Trainer provides trainers opportunities to enhance their professional skills as they design and develop quality training programs using a Systematic Approach to Training (SAT). Using a SAT is not only a NERC requirement; it is an essential component in developing great training.

The 2024 Train-the-Trainer curriculum will consist of an Instructor-led workshop at SPP in Little Rock, AR. Additionally, there are on-line self-study modules that focus on the principles of ADDIE and other training topics. *Please see the SPP Learning Center for a complete description of each training event.*

Members of Southwest Power Pool, Inc. may participate in stakeholder training events at no additional cost. Non-members wishing to participate in SPP training events will be charged according to SPP's Stakeholder Training pricing structure.

### Who should attend these sessions?

- Individuals responsible for conducting training for their respective entities.
- System Operators and other operations personnel who play a role in training.

### Course Fee for Non-members:

**Train-the-Trainer self-study** – \$25/per person

**Train-the-Trainer workshop** – (16 hours) \$400/per person

All payments are made through the SPP Learning Center. SPP does not invoice but accepts all major credit cards for payment.

### Other Details

**NERC ILA IDs:** SPP's Stakeholder Training Department follows NERC's guidelines for awarding Continuing Education hours. The Train-the-Trainer courses do not address the approved Continuing Education topics found in Appendix A of NERC's Continuing Education Manual.

***Therefore, no continuing education hours will be awarded for the Train-the-Trainer classes.***

**Event Contact:** [Jennifer Farley](#) – 501-688-8398

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### 2024 Workshop Dates and Times: (All times are CPT)

August 6 - 1300 – 1700

August 7 - 0800 – 1700

August 8 - 0800 – 1200

### **eLearning - Subject Matter Expert Training**

*No Continuing Education Hours are available for these courses.*

According to NERC guidelines, a Subject Matter Expert (SME) must receive training before conducting training sessions. SPP's Stakeholder Training Department has developed two self-studies in order to provide SMEs with the necessary training.

If an organization is a member of Southwest Power Pool, Inc., they may request these Subject Matter Expert self-studies at no additional cost. Non-members will not have access to these self-studies.

### **eLearning - Adventures in Training - Subject Matter Expert (SME) Training**

The Subject Matter Expert (SME) Training self-study is intended for individuals who have been identified as SMEs in their fields and subsequently asked to provide training. This thirty-minute self-study guides SMEs through relevant information pertaining to their responsibilities before, during, and after their session. Along the way, they will identify effective planning and presentation techniques and strategies. No CEH credit is awarded.

### **eLearning - Learning the R.O.P.E.S.: Subject Matter Expert Training**

Learning the R.O.P.E.S - Subject Matter Expert (SME) Training self-study is intended for individuals who have been identified as SMEs in their fields and subsequently asked to provide training. This 30-minute scenario-based self-study navigates SMEs through the R.O.P.E.S. Method for delivering training. By learning to implement the five steps in this easy-to-use model, SMEs can ensure an effective delivery of their presentations. No CEH credit is awarded.

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## **SPP Learning Bursts**

SPP Learning Bursts are short, targeted segments of training that deliver basic and valuable knowledge in short “bursts” or sessions. This training is intended for beginners. No CEH credit is awarded.

SPP will continue to add courses to the Learning Burst series. Check back often by searching the SPP Learning Center with the term, “Reliability Learning Burst”.

Members of Southwest Power Pool, Inc., may request Learning Burst courses at no additional cost. Non-members may request access to the Learning Burst Series.

### **Train-the-Trainer Learning Burst:**

#### **The ADDIE Process**

This short Learning Burst states the purpose and benefits of using the ADDIE systematic approach model. Trainers can use the ADDIE Process to improve how they design, develop and deliver training.

Objectives:

- Identify the importance of ADDIE.
- State the benefits of ADDIE.
- Identify the five phases of the ADDIE Process.

#### **What is an ILA?**

This Learning Burst provides a five minute overview of the NERC required information needed to complete an ILA for Credential Maintenance courses. This brief session reviews NERC’s Provider User Guide on completing and ILA form as well as a few best practices.

Objectives:

- Define Individual Learning Activity (ILA) and its purpose
- Identify who needs to submit an ILA and the timing requirements
- Name the information required for ILA submissions

### **General Learning Burst:**

#### **What is ACE? Learning Burst**

Those taking this reliability Learning Burst virtual training should have a basic understanding of frequency and interchange. This Learning Burst is designed to provide the learner with a brief definition of Area Control Error (ACE) and why it is important.

Search the SPP Learning Center for the term “ACE” for more information and for registration options.

#### **How to Calculate ACE? Learning Burst**

This Learning Burst virtual training is designed to provide the learner with four different methods for calculating ACE. The learner can review any of the four methods for understanding and then apply the knowledge learned to several example calculations. Each example calculation will also provide a guided review using each of the four methods. It is suggested that those taking this Learning Burst have already completed the [What is ACE?](#) Learning Burst.

Search the SPP Learning Center for the terms “ACE” or “How to” for more information and for registration options.

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**\*No Continuing Education Hours are available for these courses.**