

SPP Customer Training - Reliability
2015 Course Offerings

This document provides course descriptions and sessions scheduled as of October 15, 2014, for the 2015 calendar year. Registrations for these classes will open at **8:00 a.m. on Thursday, November 20, 2014, in the [SPP Learning Center \(LMS\)](#)**. Once registration opens, sessions will be displayed on, and can be requested from, the SPP Learning Center's Session Calendar. **Note:** You must have an account in the SPP Learning Center in order to log on. Links to create an account can be found on the sign-on page of the SPP Learning Center.

Schedule of Classes

(Press CTRL and click the title to view the course description, NERC continuing education hours, course fees, contact information and dates offered.)

Note: As of January 1, 2011, any Emergency hours provided by the Southwest Power Pool, Inc. (SPP) Customer Training department are intended to be applicable to SPP employees only. Participating entities, including but not limited to SPP member organizations, are responsible to determine whether SPP Emergency hours are applicable to its organization and satisfy the requirements and measurements of PER-005-1 as the standard pertains to their individual organization.

Self-Study (with CEHs):

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

[Outage Coordination – CROW](#)

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

[Restoration Principles](#)

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

Self-Study (without CEHs):

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

[SME – Learning the R.O.P.E.S](#)

Learning Bursts (no CEHs):

[What is ACE?](#)

[How to Calculate ACE](#)

January, 2015

13-15 [Train-the-Trainer Instructor-Led Workshop – Little Rock - \(Basic\)](#)

21 - 22 [System Restoration Drill](#)

27 [Net Conference – Voltage Control and System Stability](#)

28 [Net Conference – Operator Awareness](#)

29 [Net Conference – Power System Protection](#)

February, 2015

- 3-4 [System Restoration Drill](#)
- 5 [Net Conference – IROL](#)
- 10 [Net Conference – Capacity and Energy Emergencies](#)
- 11 [Net Conference – Voltage Control and System Stability](#)

- 12 [Net Conference – Operator Awareness](#)
- 24-25 [Emergency Response Drill](#)
- 26 [Net Conference – Power System Protection](#)
- 26 [Net Conference – Train-the-Trainer](#)

March, 2015

- 3-5 [REOPs Classroom Simulation Training](#)
- 16-19 [System Operations Conference \(SOC\) – Little Rock, AR](#)
- 24-25 [System Restoration Drill](#)
- 26 [Net Conference – Power System Protection](#)
- 31 [Net Conference – Marketplace Reliability](#)

April, 2015

- 1 [Net Conference – Flowgate Mitigation](#)
- 2 [Net Conference – Capacity and Energy Emergencies](#)
- 7-8 [System Restoration Drill](#)
- 9 [Net Conference – IROL](#)
- 14-15 [Emergency Response Drill](#)
- 16 [Net Conference – Operator Awareness](#)
- 20-23 [System Operations Conference \(SOC\) – Lafayette, LA](#)
- 28-30 [REOPs Classroom Simulation Training](#)

May, 2015

- 5-6 [Emergency Response Drill](#)
- 7 [Net Conference – Capacity and Energy Emergency](#)
- 13 [Net Conference - IROL](#)
- 13 [Net Conference – Train the Trainer](#)
- 18-21 [System Operations Conference \(SOC\) – Kansas City, MO](#)
- 26 [Net Conference – Voltage Control and System Stability](#)
- 27 [Net Conference – Marketplace Reliability](#)
- 28 [Net Conference – Flowgate Mitigation](#)

June, 2015

- 2-4 [REOPs Classroom Simulation Training](#)
- 23-25 [System Restoration Drill](#)

July, 2015

- 14-15 [Emergency Response Drill](#)

August, 2015

- 4-6 [Train-the-Trainer Instructor-Led Workshop – Little Rock - \(Intermediate\)](#)
- 18-20 [System Restoration Drill](#)

September, 2015

- 1 [Net Conference – Marketplace Reliability](#)
- 2 [Net Conference – Flowgate Mitigation](#)
- 3 [Net Conference – Power System Protection](#)
- 10 [Net Conference – IROL](#)

- 14-17 [System Operations Conference \(SOC\) – Springfield, MO](#)
- 22-24 [REOPs Classroom Simulation Training](#)
- 29-30 [System Restoration Drill](#)

October, 2015

- 1 [Net Conference – IROL](#)
- 14-15 [System Restoration Drill](#)
- 19-22 [System Operations Conference \(SOC\) – Oklahoma City, OK](#)
- 27-29 [REOPs Classroom Simulation Training](#)

November, 2015

- 3 [Net Conference – Voltage Control and System Stability](#)
- 4 [Net Conference – Marketplace Reliability](#)
- 5 [Net Conference – Flowgate Mitigation](#)
- 10 [Net Conference – Operator Awareness](#)
- 11 [Net Conference – Capacity and Energy Emergencies](#)
- 12 [Net Conference – Power System Protection](#)
- 17-18 [System Restoration Drill](#)
- 19 [Net Conference – IROL](#)

December, 2015

- 1-3 [REOPs Classroom Simulation Training](#)
- 8-9 [System Restoration Drill](#)
- 10 [Net Conference – Power System Protection](#)
- 15 [Net Conference – Train the Trainer – Forum](#)

Course Descriptions

SPP System Operations Conference

SPP will host five System Operations Conferences (SOCs) designed to provide participants with valuable NERC continuing education hours and an opportunity to network with others who serve in the system operations environment.

Members of Southwest Power Pool, Inc. may participate in 2015 customer training events at no additional cost. Non-members wishing to participate in SPP training events will be charged according to SPP's Customer Training pricing structure. This is *Intermediate level* training, designed primarily for persons who have some previous experience in system operations.

Course Fee for Non-members:

System Operations Conference - SOC (24 hours) - \$1420/per person (\$55/Continuing Education Hour and \$25/ per day for meals)

All payments will be 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: NERC ILA **SPP_025_SOC_2015** 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: 24 Operating Topics hrs; (*hours are subject to change pending NERC approval and final agenda*). Partial Credit may be awarded per session.

Other Details: Details TBA.

Event Contact: [Kim Burnside](#) – 501-482-2056

2015 Dates and Cities:

March 16-19, Little Rock, AR
April 20-23, Lafayette, LA

May 18-21, Kansas City, MO
September 14-17 Springfield, MO
October 19-22, Oklahoma City, OK

REOPs Classroom Simulation Training

This 2.5 day Regional Emergency Operations classroom session will take participants through simulated activities dealing with such topics as transmission loading relief, congestion management, voltage control, system stability, interconnection and distributed flow. Concepts such as Operator Awareness, Communication, and the Critical Decision Making Process will also be addressed. Each participant will be provided hands-on interaction with each of SPP's training environments for mitigation of the scenarios presented, including IROL flowgate exceedance scenarios.

If an organization is a member of Southwest Power Pool, Inc., they may participate in the 2015 customer training events at no additional cost. Non-members wishing to participate in SPP training events will be charged according to SPP's Customer Training pricing structure. Non-members that send participants for training hosted at the SPP's facility will be charged the fee associated with the event plus an additional \$25 per person per day for meals and materials.

This is *Intermediate* level training.

Course Fee for Non-members:

EOPs Training (20 hours) – \$950/per person (\$45/Continuing Education Hour and \$25/per day for meals)

All payments will be 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: NERC ILA **SPP_025_REOPs_2015** 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, 20 Standards hrs, 16 Simulation hrs, 20 EOPS hrs
Partial credit is not offered for this course.

Location: Southwest Power Pool

Address: 201 Worthen Dr.

City: Little Rock

State: Arkansas

Zip: 72223

Event Contact: [Margaret Q. Adams](#) – 501-614-3379

Dates:

March 3-5

April 28-30

June 2-4

September 22-24

October 27-29

December 1-3

SPP Train-the-Trainer

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

The 2015 Train-the-Trainer curriculum will consist of three net conferences and two 3 day instructor- led training workshops:

Putting the Pieces Together – Basic level training which covers the basic principles of the ADDIE Systematic Approach Model

RAMP-Up Your Training - Intermediate level training for trainers who possess a strong understanding of basic training principles.

For training certification, it is recommended that learners participate in all three net-conferences and the applicable instructor-led training workshop.

If an organization is a member of Southwest Power Pool, Inc., they may participate in the 2015 customer training events at no additional cost. Non-members wishing to participate in SPP training events will be charged according to SPP's Customer Training pricing structure.

Who should attend these sessions?

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

Course Fee for Non-members:

Train-the-Trainer Instructor Led Workshops – (24 hours each) \$500.00 / participant

Train-the-Trainer Net Conferences – (1.5 hours) \$35.00

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

Other Details

NERC ILA IDs: SPP's Customer Training Department follows NERC's guidelines for awarding Continuing Education hours. This course does not address the approved topics according to Appendix A of the Continuing Education Manual. ***Therefore, no continuing education hours will be awarded for the Train the Trainer classes.***

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

2015 Dates: [January 13-15 – Instructor-Led workshop – Putting the Pieces Together \(Basic\)](#)
[February 26 - PM Net Conference – Writing Valid and Reliable Assessments](#)
[May 13 – PM Net Conference – Questioning Techniques](#)
[August 4-6 - Instructor-Led Workshop – RAMP-Up Your Training \(Intermediate\)](#)
[December 15 - PM Net Conference: Trainer Forum](#)

System Restoration Drill (2 day and 3 day offerings)

SPP's system restoration drills are designed to provide participants a high level test of coordination, communication and restoration. Drills will be conducted via net conference, allowing entities to avoid travel costs by participating from their own facility. SPP's Dispatcher Training Simulator (DTS) will be available through remote access, and SPP will offer preliminary training for member facilitators on the use of the simulator. The drills will emphasize the application of NERC Standards, SPP Criteria, and industry principles and guidelines related to system restoration. ***Facilitators will need to 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 system restoration. We strongly recommend learners planning to participate in a system restoration drill first complete SPP's Restoration Principles Self-Study virtual training or other comparable restoration-focused training.

Members of Southwest Power Pool, Inc. may participate in 2015 customer training events at no additional cost. Non-members wishing to participate in SPP training events will be charged according to SPP's Customer Training pricing structure.

Course Fee for Non-members:

System Restoration Drill (16 hours) – \$770/entity (\$45/Continuing Education Hour)

System Restoration Drill (24 hours) - \$1,155/entity (\$45/Continuing Education Hour)

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

Other Details

NERC ILA Number: NERC ILA **SPP_025_SRD_2_2015** and NERC ILA **SPP_025_SRD_3_2015** (*pending approval*) are 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 Hours Breakdown:

SPP's System Restoration Drills are offered in two and three day formats.

Two Day: Totals: 16 Operating Topic hrs, 16 Standards hrs, 15 Simulation hrs, 16 EOPs hrs

Partial Credit available – Partial credit will only be awarded to those participating in whole-day increments only.

Day 1 – Approx. 8 Op Topics hrs, 8 Standards hrs, 7 Sim hrs, 8 EOPs hrs

Day 2 – Approx. 8 Op Topics hrs, 8 Standards hrs, 8 Sim hrs, 8 EOPs hrs

Three Day: Totals: 24 Operating Topic hrs, 24 Standards hrs, 23 Simulation hrs, 24 EOP hrs

Partial Credit available - Partial credit will only be awarded to those participating in whole-day increments only.

Day 1 – Approx. 8 Op Topics hrs, 8 Standards hrs, 7 Sim hrs, 8 EOPs hrs

Day 2 – Approx. 8 Op Topics hrs, 8 Standards hrs, 8 Sim hrs, 8 EOPs hrs

Day 3 – Approx. 8 Op Topics hrs, 8 Standards hrs, 8 Sim hrs, 8 EOP hrs

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

2015 Dates:

January 21-22

February 3-4

March 24-25

April 7-8

June 23-25 (3 day)

August 18-20 (3 day)

September 29-30

October 14-15

November 17-18

December 8-9

Emergency Response Drills

SPP's Emergency Response Drills are designed to take participants through simulated emergency scenarios that expose them to emergency operating conditions such as voltage and frequency control, system stability, system protection, and reactive power flow. Concepts such as Emergency Planning, Situational Awareness, Communication, and the Critical Decision Making Process will also be discussed.

The Emergency Response Drills will be conducted via net conference with each entity participating from its own facility. SPP's Dispatcher Training Simulator (DTS) will be available through remote access, and SPP will offer preliminary training for member facilitators on the use of the simulator. The drills will emphasize the application of NERC Standards, SPP Criteria, and industry principles and guidelines related to maintaining system reliability. ***Facilitators will need to be registered and present to assess each participant's performance in the simulation activity.***

If an organization is a member of Southwest Power Pool, Inc., they may participate in the 2015 customer training events at no additional cost. Non-members wishing to participate in SPP training events will be charged according to SPP's Customer Training pricing structure.

This is *Intermediate level* training.

Course Fee for Non-members:

Emergency Response Drill (16 hours) – \$720/entity or \$45/Continuing Education Hour

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

Other Details

NERC ILA Number: NERC ILA **SPP_025_ERD_2015** 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 Hours Breakdown:

Totals: 16 Operating Topics hrs, 16 Standards hrs, 12 Simulation hrs, 16 EOPs hrs
Partial credit is not offered for this course.

Event Contact: [PJ Rose](#) – 501-688-8297

2015 Dates: February 24- 25 – North
April 14-15 – Central

May 5-6 - Central
July 14-15 - North

Net Conference – Voltage Control and System Stability

This three-hour net conference, virtual training session, presents a high level overview of how reactive power influences power flow in a transmission system. The session will include discussion on the ability of an electric system to maintain adequate voltage during normal and emergency conditions. The importance of maintaining voltage and angular stability will also be discussed.

If an organization is a member of Southwest Power Pool, Inc., they may participate in the 2015 customer training events at no additional cost. Non-members wishing to participate in SPP training events will be charged according to SPP's Customer Training pricing structure.

This is *Intermediate level* training.

Course Fee for Non-members:

Net Conference (3 hours) - \$135/per person or \$45/Continuing Education Hour

All payments will be 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: NERC ILA **SPP_025_NC_VCSS_2015** 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, 3 Standards hrs, 3 EOPS hrs

Net conference training material and instructions will be provided to registered participants once registration has closed.

Event Contact: [Margaret Q. Adams](#) – 501-614-3379

2015 Dates:

January 27	May 26
February 11	November 3
All sessions are scheduled from 8 to 11 a.m.	

Net Conference – Capacity and Energy Emergencies

This two-hour net conference, virtual training session, will discuss the Energy Emergency Alert process, including the use of energy emergency alerts during capacity deficiencies and other emergency situations. Additional expectations relevant to SPP Criteria and regional processes will also be discussed.

If an organization is a member of Southwest Power Pool, Inc., they may participate in the 2015 customer training events at no additional cost. Non-members wishing to participate in SPP training events will be charged according to SPP's Customer Training pricing structure.

This is *Intermediate level* training.

Course Fee for Non-members:

Net Conference (2 hours) - \$90/per person or \$45/Continuing Education Hour

All payments will be 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: NERC ILA **SPP_025_NC_CEE_2015** 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: 2 Operating Topics hrs, 2 Standards hrs, 2 EOPS hrs

Net conference training material and instructions will be provided to registered participants once registration has closed.

Event Contact: [Margaret Q. Adams](#) – 501-614-3379

2015 Dates: February 10 May 7
 April 2 November 11
 All sessions are scheduled from 9 to 11 a.m.

Net Conference – Power System Protection

This three-hour net conference, virtual training session, will review the basics of Power System Protection. Different relay types, functionality, and application will be discussed including special protection systems, sync-check relays and load shedding relay schemes. NERC Standard and SPP Criteria expectations regarding use and coordination of system protection will also be reviewed.

If an organization is a member of Southwest Power Pool, Inc., they may participate in the 2015 customer training events at no additional cost. Non-members wishing to participate in SPP training events will be charged according to SPP's Customer Training pricing structure.

This is *Intermediate level* training.

Course Fee for Non-members:

Net Conference (3 hours) - \$135/per person or \$45/Continuing Education Hour

All payments will be 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: NERC ILA **SPP_025_NC_PSP_2015** 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: *Pending approval* 3 Operating Topics hrs, 3 Standards hrs, 3 EOPS hrs

Net conference training material and instructions will be provided to registered participants once registration has closed.

Event Contact: [Margaret Q. Adams](#) – 501-614-3379

2015 Dates:

January 29

September 3

February 26

November 12

March 26

December 10

All sessions are scheduled on Thursdays from 8 to 11 a.m.

Net Conference - Operator Awareness

This two-hour net conference, virtual training session, will discuss the use of operator awareness to recognize reliability issues on the system and respond accordingly. The discussion will include the importance of effective operational communications for sufficient operator awareness.

If an organization is a member of Southwest Power Pool, Inc., they may participate in the 2015 customer training events at no additional cost. Non-members wishing to participate in SPP training events will be charged according to SPP's Customer Training pricing structure.

This is *Intermediate level* training.

Course Fee for Non-members:

Net Conference (2 hours) - \$90/per person or \$45/Continuing Education Hour
All payments will be 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: NERC ILA **SPP_025_NC_OA_2015** 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: 2 Operating Topics hrs, 2 Standards hrs, 2 EOPS hrs

Net conference training material and instructions will be provided to registered participants once registration has closed.

Event Contact: [Margaret Q. Adams](#) – 501-614-3379

2015 Dates: January 28 April 16
 February 12 November 10
 All sessions are scheduled from 9 to 11 a.m.

Net Conference - Marketplace Reliability

This three-hour net conference, virtual training session, will describe the processes and procedures used by the SPP Reliability Coordinator (RC) in mitigation of constraints affected by Market footprint flow. The purpose of this course is to familiarize participants in the methods, tools, communications, and procedures used by the SPP RC when managing congestion in the SPP Market and affected neighboring areas. The session will also discuss other real-time emergency operations conditions and how they are managed in the SPP Integrated Marketplace.

Prior to attending this session, each participant should have a clear understanding of flowgates, distribution factors, and the Transmission Loading Relief (TLR) process. Reference material will be provided for review prior to the session.

If an organization is a member of Southwest Power Pool, Inc., they may participate in the 2015 customer training events at no additional cost. Non-members wishing to participate in SPP training events will be charged according to SPP's Customer Training pricing structure.

This is *Intermediate level* training.

Course Fee for Non-members:

Net Conference (3 hours) - \$135/per person or \$45/Continuing Education Hour

All payments will be 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: NERC ILA **SPP_025_NC_MR_2015** 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; 3 Standards hrs; 3 EOPS hrs

Net conference training material and instructions will be provided to registered participants once registration has closed.

Event Contact: [Margaret Q. Adams](#) – 501-614-3379

2015 Dates: [March 31](#) [September 1](#)
 [May 27](#) [November 4](#)
 All sessions are scheduled from 8 to 11 a.m.

Net Conference – Flowgate Mitigation

This three-hour net conference, virtual training session, will provide a sample Flowgate scenario for the participants to mitigate. The intention is to apply flowgate, distribution factor, Transmission Loading Relief (TLR), and Congestion Management concepts. The instructor will share information from tools, such as the OATI Training Interchange Distribution Calculator (IDC) and the Dispatcher Training Simulator (DTS), to provide information to the participants, which will provide data for participants' application in their assessment worksheets.

Prior to attending this session, each participant should have a clear understanding of flowgates, distribution factors, and the Transmission Loading Relief (TLR) process. Reference material will be provided for review prior to the session. Each participant is encouraged to attend the Marketplace Reliability Net Conference virtual training session before attending the Flowgate Mitigation Net Conference.

If an organization is a member of Southwest Power Pool, Inc., they may participate in the 2015 customer training events at no additional cost. Non-members wishing to participate in SPP training events will be charged according to SPP's Customer Training pricing structure.

This is *Intermediate level* training.

Course Fee for Non-members:

Net Conference (3 hours) - \$135/per person or \$45/Continuing Education Hour

All payments will be 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: NERC ILA **SPP_025_NC_FM_2015**) 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: *Pending approval* 3 Operating Topics hrs; 3 Standards hrs; 2 Sim hrs; 3 EOPS hrs

Net conference training material and instructions will be provided to registered participants once registration has closed.

Event Contact: [Margaret Q. Adams](#) – 501-614-3379

2015 Dates: April 1 September 2
 May 28 November 5
 All sessions are scheduled from 8 to 11 a.m.

Net Conference – IROL

This three-hour net conference, virtual training session, is intended to provide an opportunity to entities identified in the SPP IROL Relief Guides who are not able to send their operators to the SPP Regional Emergency Operations Classroom Simulation training. The need for simulation training on IROL flowgates was identified as a result of PER-005-1, Requirement 3.1, effective April 1, 2014.

The participants will participate and interact with the instructor via WebEx and teleconference. The instructor will display/present tools, such as the Training IDC and the DTS, to provide information to the participants which will clarify concepts and provide data for participants' application in their assessment worksheets.

Prior to attending this session, each participant should have a clear understanding of flowgates, distribution factors, and the Transmission Loading Relief (TLR) process. Reference material will be provided for review prior to the session. Each participant is encouraged to attend the Marketplace Reliability Net Conference virtual training session before attending the IROL Net Conference.

If an organization is a member of Southwest Power Pool, Inc., they may participate in the 2015 customer training events at no additional cost. Non-members wishing to participate in SPP training events will be charged according to SPP's Customer Training pricing structure.

This is *Intermediate level* training.

Course Fee for Non-members:

Net Conference (3 hours) - \$135/per person or \$45/Continuing Education Hour

All payments will be 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: NERC ILA **SPP_025_NC_IROL_2015** 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, 3 Standards hrs, 1 Sim hr, 3 EOPS hrs

Net conference training material and instructions will be provided to registered participants once registration has closed.

Event Contact: [PJ Rose](#) – 501-688-8297

2015 Dates: All times 0800-1100

February 5

May 13

October 1

April 9

September 10

November 19

Reserve Sharing System (RSS) Self-Study

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

This self-study virtual training 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.

If an organization is a member of Southwest Power Pool, Inc., they may request self-study courses at no additional cost. Non-members wishing to take SPP training events will be charged according to SPP's Customer Training pricing structure.

Course Fee for Non-members:

Self-Study (1.5 hours) - \$67.50/per person or \$45/Continuing Education Hour

All payments will be 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: NERC ILA **SPP_025_2012_RSS_SS** 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; 1.5 EOPS hrs

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

Outage Coordination – CROW Self-Study

SPP uses the CROW Outage Scheduler to keep SPP informed of planned and emergency outages of transmission elements and generating units. The Outage-Coordination – CROW Self-Study virtual training will describe the importance and timeliness of outage coordination and reporting. An emphasis will be placed on SPP Criteria Appendix 12 and the CROW outage submission tool.

This is *Intermediate level* training.

If an organization is a member of Southwest Power Pool, Inc., they may request self-study courses at no additional cost. Non-members wishing to take SPP training events will be charged according to SPP's Customer Training pricing structure.

Course Fee for Non-members:

Self-Study (1.5 hours) - \$67.50/per person or \$45/Continuing Education Hour

All payments will be 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: NERC ILA **SPP_025_CROW_SS_2014** 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; 1.5 EOPS hrs

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

Control Performance Standards Self-Study

This Self-Study virtual training is designed to ensure participants develop an understanding of the three Control Performance Standards: CPS1, CPS2, and DCS (Disturbance Control Standard). Applicable concepts, such as ACE, frequency, and L_{10} will also be discussed, as well as the expectations for compliance with each of these standards. Balancing Authority ACE Limit (BAAL) will also be reviewed.

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.

If an organization is a member of Southwest Power Pool, Inc., they may request self-study courses at no additional cost. Non-members wishing to take SPP training events will be charged according to SPP's Customer Training pricing structure.

Course Fee for Non-members:

Self-Study (1 hour) - \$45/per person or \$45/person per Continuing Education Hour

All payments will be 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: NERC ILA **SPP_025_SS_CPS_2014** 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; 1 EOPS hr

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

System Restoration Principles (SRP) Self-Study

This Self-Study virtual training 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 those 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 courses at no additional cost. Non-members wishing to take SPP training events will be charged according to SPP's Customer Training pricing structure.

Course Fee for Non-members:

Self-Study (1 hour) - \$45/per person or \$45/person per Continuing Education Hour

All payments will be 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: NERC ILA **SPP_025_RP_SS_2015** 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; 1 EOPS 1 hr

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

Transmission Loading Relief (TLR) Self-Study

This Self-Study virtual training 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 addressing Network and Native Load (NNL) relief. Applicable NERC and SPP requirements will also be reviewed.

This is *Intermediate level* training.

If an organization is a member of Southwest Power Pool, Inc., they may request self-study courses at no additional cost. Non-members wishing to take SPP training events will be charged according to SPP's Customer Training pricing structure.

Course Fee for Non-members:

Self-Study (1 hour) - \$45/per person or \$45/person per Continuing Education Hour

All payments will be 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: NERC ILA **SPP_025_SS_TLR_2015** 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; 1 EOPS 1 hr

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

Subject Matter Expert Training – Self-Studies
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 Customer 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.

We highly recommend you take both self-studies.

The Subject Matter Expert (SME) Training- Self-Study

The Subject Matter Expert (SME) Training Self-Study virtual training 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.**

Learning the R.O.P.E.S. – Subject Matter Expert Training – Self-Study

Learning the R.O.P.E.S - Subject Matter Expert (SME) Training Self-Study virtual training is intended for individuals who have been identified as SMEs in their fields and subsequently asked to provide training. This thirty (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.**

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”.

If an organization is a member of Southwest Power Pool, Inc., they may request Learning Burst courses at no additional cost. Non-members may request access to the Learning Burst Series.

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 with the term “ACE” for more information and registration.

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 4 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 with the terms “ACE” or “How to” for more information and registration.