



2023 SPP WESTERN ENERGY IMBALANCE SERVICE MARKET (WEIS) TRAINING CATALOG

By SPP Stakeholder Training

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REVISION HISTORY

VERSION NUMBER	DATE CHANGE	AUTHOR	CHANGE DESCRIPTION
1.0	4/1/2022	Becky Gifford	Created catalog
1.1	4/21/2022	Becky Gifford	Removed all reference to "LMS" just using SPP Learning Center. Added OOME Reference Guide
1.2	5/5/2022	Kim Burnside	Changed Customer Training to Stakeholder Training
1.3	12/15/2022	Becky Gifford	Updated catalog for 2023
1.4	1/17/2023	Becky Gifford	Updated WEIS Up: Energy Imbalance & Market Execution course.
1.5	4/27/2023	Kim Burnside	Added OOME Learning Burst to Learning Burst section

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INTRODUCTION

The Western Energy Imbalance Service Market (WEIS) catalog is a guide to WEIS training courses and materials. This document categorizes WEIS training by series (or curriculum) and training type to help you quickly locate desired training for Market Participants (MPs) that are new to Southwest Power Pool (SPP), need to onboard new staff at their organizations, or need a refresher about WEIS topics.






NOTE: This document is owned by SPP's Stakeholder Training. For questions or comments, send an email to SPPStakeholderTraining@spp.org.

To download the latest version of this document, use this [link](https://www.spp.org/stakeholder-center/stakeholder-training/) on spp.org (https://www.spp.org/stakeholder-center/stakeholder-training/) and go to Related Documents.

TRAINING CATALOG OVERVIEW

TYPES OF TRAINING

The table below details the types of training content available in the SPP Learning Center. The icons shown are the same as those that display in the SPP Learning Center when searching and registering for training.

Icon	Brief Description
 <p>Online Classes</p>	<p>Online classes are single eLearning modules, also known as computer-based training (CBT) modules. These are self-paced and can be paused/re-played at the discretion of the learner.</p> <p>Some online classes will have a prefix of "Learning Burst". These are short-targeted segments of online training that deliver basic and valuable knowledge in short "bursts" or sessions (10 minutes or less).</p>
 <p>Curriculum</p>	<p>A curriculum is a collection of online courses available as a complete package in the SPP Learning Center.</p>
 <p>Events</p>	<p>Events include both instructor-led and virtual instructor-led training (ILT and VILT) as a live delivery. Events will have one or more sessions to select a time and location preference.</p>
 <p>Videos</p>	<p>Videos will have the play button icon to indicate a recorded video and/or audio file format.</p>
 <p>Materials</p>	<p>Materials are topic-specific objects available for the learner's reference in the SPP Learning Center. There are many types of reference materials available such as:</p> <ul style="list-style-type: none"> • Job Aids • User Guides • Reference Guides • Reference Cards

SPP LEARNING CENTER INFORMATION

CREATING AN ACCOUNT IN THE SPP LEARNING CENTER

First-time visitors to the SPP Learning Center must create an account using their business email address to gain access. The following information is needed to register and create a login account:

1. A valid business email address
2. Your entity registration status (i.e. Member or Non-Member)
3. Division/Company name of entity

MEMBER VS. NON-MEMBER REGISTRATION STATUS

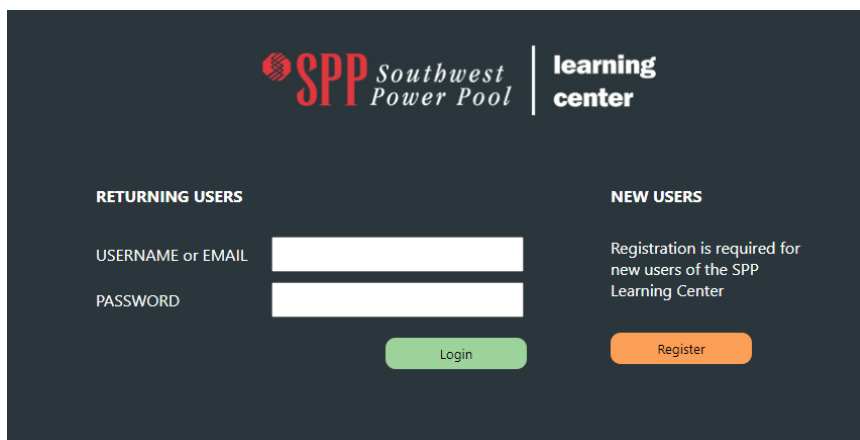
MEMBER REGISTRATION – Employees of SPP Member companies

For a list of SPP Member companies, go to the Members and Market Participants page of SPP.org.

NON-MEMBER REGISTRATION – Employees of non-member companies.

This includes Market Participants, registered entities who are not SPP members, etc.

To create your account go to spp.csod.com and click **Register**. Contact LMS@spp.org with any questions.



The screenshot shows the SPP Learning Center login and registration page. At the top left is the SPP Southwest Power Pool logo. To the right is the 'learning center' logo. Below the logos, there are two columns: '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 note: 'Registration is required for new users of the SPP Learning Center', followed by an orange 'Register' button.

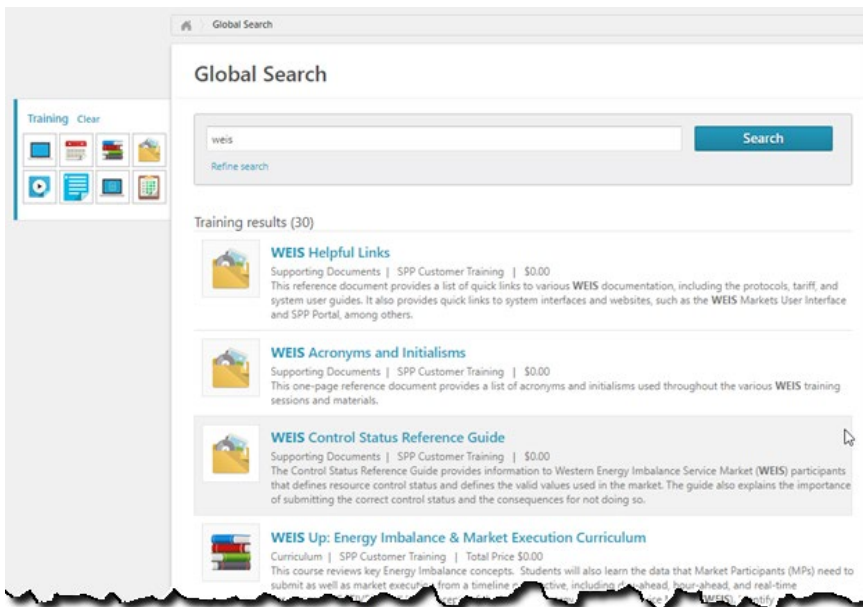
BROWSING FOR TRAINING

After you create an account and log into the SPP Learning Center with your credentials, follow the below steps to find WEIS training.

1. Locate the Search field in the upper right-hand corner of the page.
2. Type "WEIS" into the Search field.



3. Click on the desired course name from the list of courses that display on the page.



USING QUICK SEARCHES TO LOCATE CONTENT

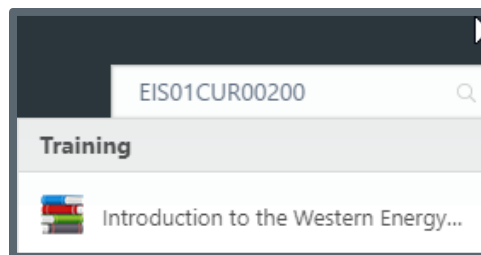
To find and request the training, the search capabilities discussed under [Browsing for Training](#) on the previous page can be used. A desired course can also be found by typing a **Course ID** or **Course Title**.

Title	Course ID	Format	Duration
Introduction to the Western Energy Imbalance Service Market (WEIS) Curriculum	EIS01CUR00200	Curriculum (7 Modules)	27 Minutes

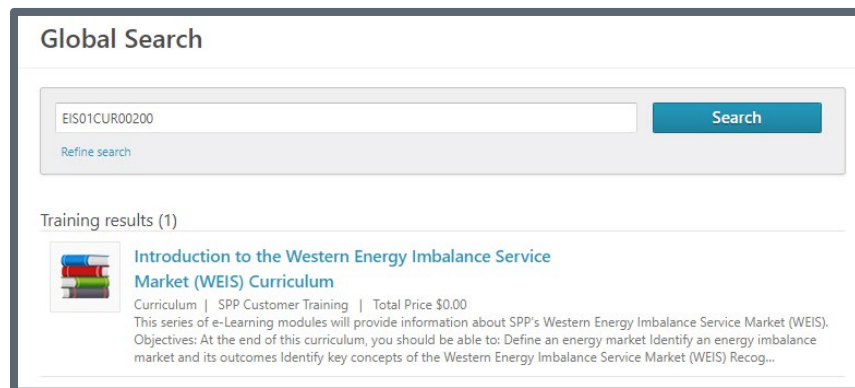
Description: This series of eLearning modules provide information about SPP's WEIS.

To locate the first course in the above table using a Course ID:

Type "EIS01CUR00200" in the Search field in the upper right-hand corner of the SPP Learning Center home page.



The results from the search will look like this:



To locate the same course using a Title:

Type "Introduction to the Western Energy Imbalance Service Market (WEIS) Curriculum" in the Search field.

The results will be the same as shown above.

ONBOARDING: WHAT COURSES DO I NEED TO TAKE?

Market Participants (MPs) are required to complete training during the onboarding process. SPP Stakeholder Training encourages AT LEAST one individual within each organization to complete ALL training listed in this catalog.

IMPORTANT ONBOARDING NOTE:

All training must be completed by one or more individuals within each organization.

Completion of this training will provide MPs with knowledge of the WEIS concepts and activities necessary for efficient and effective participation in not only Member Training Environment (MTE) testing, but also in the production environment.

While these courses provide learning opportunities that aid understanding, each MP organization will be expected to certify performance readiness upon completion of the onboarding process.

Submit an Inquiry via the [Request Management System](#) (RMS) with any questions:

- Questions regarding the recommended training? Choose "Training" in the Subtype 1 field.
- Questions regarding onboarding? Access your Open Ticket in the RMS.

WEIS COURSE CATALOG

INTRODUCTION

Title	Course ID	Format	Duration
Introduction to the Western Energy Imbalance Service Market (WEIS) Curriculum	EIS01CUR00200	Curriculum (7 Modules)	27 Minutes
<p><i>Description: This series of eLearning modules provide information about SPP's WEIS. At the end of this curriculum, you should be able to define an energy market, identify an energy imbalance market and its outcomes, identify key concepts of WEIS, and recognize the roles and responsibilities of WEIS.</i></p>			

WEIS UP SERIES

Title	Course ID	Format	Duration
WEIS Up: Energy Imbalance & Market Execution	EIS06CBT00100	Online eLearning	1 Hour, 2 Minutes
<p><i>Description: This course reviews key Energy Imbalance concepts. Students will learn the data that Market Participants (MPs) need to submit, as well as market execution from a timeline perspective, including day-ahead, hour-ahead, and real-time processes.</i></p>			
WEIS Up: Congestion Management Curriculum	EIS00CUR10000	Curriculum (1 Module & Assessment)	1 Hour
<p><i>Description: This self-study course looks at the responsibility SPP has as a Reliability Coordinator to manage congestion on the Bulk Electric System (BES) and the role WEIS plays in that effort. The course reviews SPP's Congestion Management Methodology, including generation redispatch, and outlines the role played by WEIS.</i></p>			

WEIS UP SERIES (CONT'D.)

Title	Course ID	Format	Duration
WEIS Up: Market Monitoring	EIS05CBT00200	Online eLearning	1 Hour
<p><i>Description: This course provides an overview of market monitoring in WEIS. This training also covers the Market Monitor's processes to address market power and market manipulation, the automatic and non-automatic mitigation processes, and where Market Participants (MPs) will submit tariff required data.</i></p>			
WEIS Up: Settlements Curriculum	EIS08CUR20000	Curriculum (2 Modules)	1 Hour, 2 Minutes
<p><i>Description: This course covers the basics of WEIS settlements. The training reviews each piece of the settlements process, including meter data, output reports and disputes. Students will also learn the various settlement timelines and charge types applicable to WEIS. This session also provides an example of how WEIS will settle Imbalance Energy (which includes Native Load Hedging).</i></p> <p><i>Market charge types will be discussed at a high-level, including triggers for these various charges. You can find more detailed coverage of each charge type formula in the "Word to the WEIS: Charge Type Deep Dive Curriculum".</i></p>			

WORD TO THE WEIS SERIES

Title	Course ID	Format	Duration
<p>Word to the WEIS: Seize the Operating Day Curriculum</p>	<p>EIS01CUR30200</p>	<p>Curriculum (10 Modules & Materials)</p>	<p>2 Hours, 24 Minutes</p>
<p><i>Description: This eLearning course provides SPP's WEIS Market Participants and stakeholders with information on key tasks, responsibilities, and activities associated with real-time operation of WEIS. The content contains a "day in the life" focus on a given Operating Day of the market, including instruction and scenarios on key real-time market concepts, such as resource dispatch and resource change. This course also covers the market's interaction with other possible real-time occurrences, including Out-of-Merit Energy (OOME) and contingency reserve deployment.</i></p>			
<p>Word to the WEIS: Resource Offer Data Curriculum</p>	<p>EIS06CUR30100</p>	<p>Curriculum (6 Modules & Materials)</p>	<p>43 Minutes</p>
<p><i>Description: This eLearning course will aid Market Participant in WEIS in preparing resource offers. Students will solve scenarios that enable them to develop resource offers using given data. Then, students will have an opportunity to explore how the market operator evaluates resource offer data for the supply adequacy determination. The WEIS market user interface will be briefly reviewed.</i></p>			
<p>Word to the WEIS: Charge Type Deep Dive Curriculum</p>	<p>EIS08CUR30400</p>	<p>Curriculum (8 Modules & Materials)</p>	<p>59 Minutes</p>
<p><i>Description: Four of the five WEIS settlement charge types will be covered during this course, including Uninstructed Resource Deviation (URD), Real-Time Out-of-Merit, Revenue Neutrality Uplift (RNU), and Miscellaneous. For each charge type, students will learn the high-level calculation and concepts critical to its formulation. Students will work through scenarios that enable them to analyze settlement outcomes. NOTE: The Energy Imbalance Service (EIS) Charge Type is not be covered in this course. It is covered during the "Word to the WEIS: Native Load Hedging and EIS Charge Type Curriculum".</i></p>			

WORD TO THE WEIS SERIES (CONT'D.)

Title	Course ID	Format	Duration
Word to the WEIS: Native Load Hedging and EIS Charge Type Curriculum	EIS08CUR30500	Curriculum (10 Modules & Materials)	1 Hour, 30 Minutes
<p><i>Description: The Native Load Hedging (NLH) methodology is key to determining Imbalance Energy in WEIS. During this course, students will learn concepts critical to implementing this methodology. The content will connect the NLH methodology to the EIS charge type, break down the settlement calculations, and provide high-level steps to assist in determining the EIS credit or charge amount. Learners will work through scenarios that enable them to analyze settlement outcomes.</i></p>			

LEARNING BURSTS

Title	Course ID	Format	Duration
WEIS Energy Imbalance and Market Execution Learning Burst	EIS01VID10200	Online eLearning	12 Minutes
<p><i>Description: This brief Learning Burst provides a high-level introduction of the WEIS timeline. This Learning Burst should be completed prior to taking the "Word to the WEIS: Seize the Operating Day Curriculum".</i></p>			
WEIS Load Forecasting Learning Burst	EIS06VID30100	Online eLearning	7 Minutes
<p><i>Description: This brief Learning Burst provides a high-level introduction of the WEIS Load Forecasting process. This Learning Burst should be completed prior to taking the "Word to the WEIS: Seize the Operating Day Curriculum".</i></p>			
Out-of-Merit Energy (OOME) Learning Burst	EIS06VID00100	Online eLearning	14 Minutes
<p><i>Description: This course is designed to walk participants in the WEIS market through the process for requesting an Out-of-Merit Energy.</i></p>			

ADDITIONAL ONLINE LEARNING

Title	Course ID	Format	Duration
Market Timeline and Requirements for Model Updates	EIS08CBT00200	Online eLearning	6 Minutes
<p><i>Description: This self-study course is for all Market Participants (MPs) operating resources within SPP's market. In this course, students will learn how Market Participants make model updates. This course also provides the timeline for a new MP model updates, the frequency of commercial model and network model updates, the types of changes that require a model update, and the update duration range for the different types of system updates.</i></p>			
WEIS Settlement: Meter Data	EIS08CBT00200	Online eLearning	14 Minutes
<p><i>Description: This self-study course provides an overview of how to submit Meter Data for WEIS. First, you will learn Meter Data requirements and guidelines, including an explanation of the two submission intervals and Meter Data formatting standards. Next, you will learn about State Estimator Data. Finally, this course illustrates how SPP processes Meter Data and reporting available.</i></p>			

REFERENCE GUIDES

Title	Course ID	Format	Duration
WEIS Helpful Links	EIS01REF10300	Materials (PDF)	N/A
<i>Description: This reference document provides a list of quick links to various WEIS documentation, including the protocols, tariff, and system user guides. It also provides quick links to system interfaces and websites, such as the WEIS Markets User Interface (MUI) and SPP Portal, among others.</i>			
WEIS Acronyms and Initialisms	EIS01REF10200	Materials (PDF)	N/A
<i>Description: This one-page reference document provides a list of acronyms and initialisms used throughout the various WEIS training sessions and materials.</i>			
Submitting Resource Offers in the MUI_WEIS	EIS06REF30100	Materials (PDF)	N/A
<i>Description: This short reference guide provides WEIS Market Participants guidance on how to navigate to a resource in the Markets User Interface (MUI) to submit or edit data in the resource offer. It also provides descriptions of the various offer parameters, as well as examples of when updates to offers will be implemented during the Operating Day.</i>			
Effective Resource Limits_WEIS	EIS06REF30200	Materials (PDF)	N/A
<i>Description: This job aid explains how WEIS determines capacity for dispatch and Supply Adequacy analysis using Effective Resource Limits. Effective Resource Limits may not always equal the resource limits submitted by the Market Participant. Download this job aid to learn the Effective Limits for the Western Real-Time Balancing Market (WRTBM) and Supply Adequacy Analysis depending on certain conditions.</i>			

Title	Course ID	Format	Duration
RMS Quick Tips for WEIS	EIS01REF10400	Materials (PDF)	N/A
<p><i>Description: This reference document provides quick tips on using the Request Management System (RMS), including how to create an account, submit requests, and view requests within the system.</i></p>			
Operating Instructions and Out of Merit Energy	EIS06REF10200	Materials (PDF)	N/A
<p><i>Description: The purpose of this document is to provide supplemental information to the Out-Of-Merit Energy (OOME) process in the WEIS Market. This document is not a substitute for the WEIS Market Protocols and where any discrepancy exists, the student should defer to the active version of the protocols.</i></p> <p>Note: This document is not owned by SPP Stakeholder Training. It was created by SPP Operations.</p>			
WEIS Control Status Reference Guide	EIS06REF10100	Materials (PDF)	N/A
<p><i>Description: The Control Status Reference Guide provides information to WEIS participants that defines resource control status and defines the valid values used in the market. The guide also explains the importance of submitting the correct control status and the consequences for not doing so.</i></p>			

APPENDIX: ACRONYMS AND INITIALISMS

BES	Bulk Electric System
CBT	Computer-Based Training
EIS	Energy Imbalance Service
ILT	Instructor-Led Training
MP	Market Participant
MUI	Markets User Interface
NLH	Native Load Hedging
OOME	Out-of-Merit Energy
PDF	Portable Document Format
RMS	Request Management System
RNU	Revenue Neutrality Uplift
SPP	Southwest Power Pool
URD	Uninstructed Resource Deviation
VILT	Virtual Instructor-Led Training
WEIS	Western Energy Imbalance Service market
WRTBM	Western Real-Time Balancing Market