

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Provider User Guide

Completing an Individual Learning Activity Form

January 1, 2023

RELIABILITY | RESILIENCE | SECURITY



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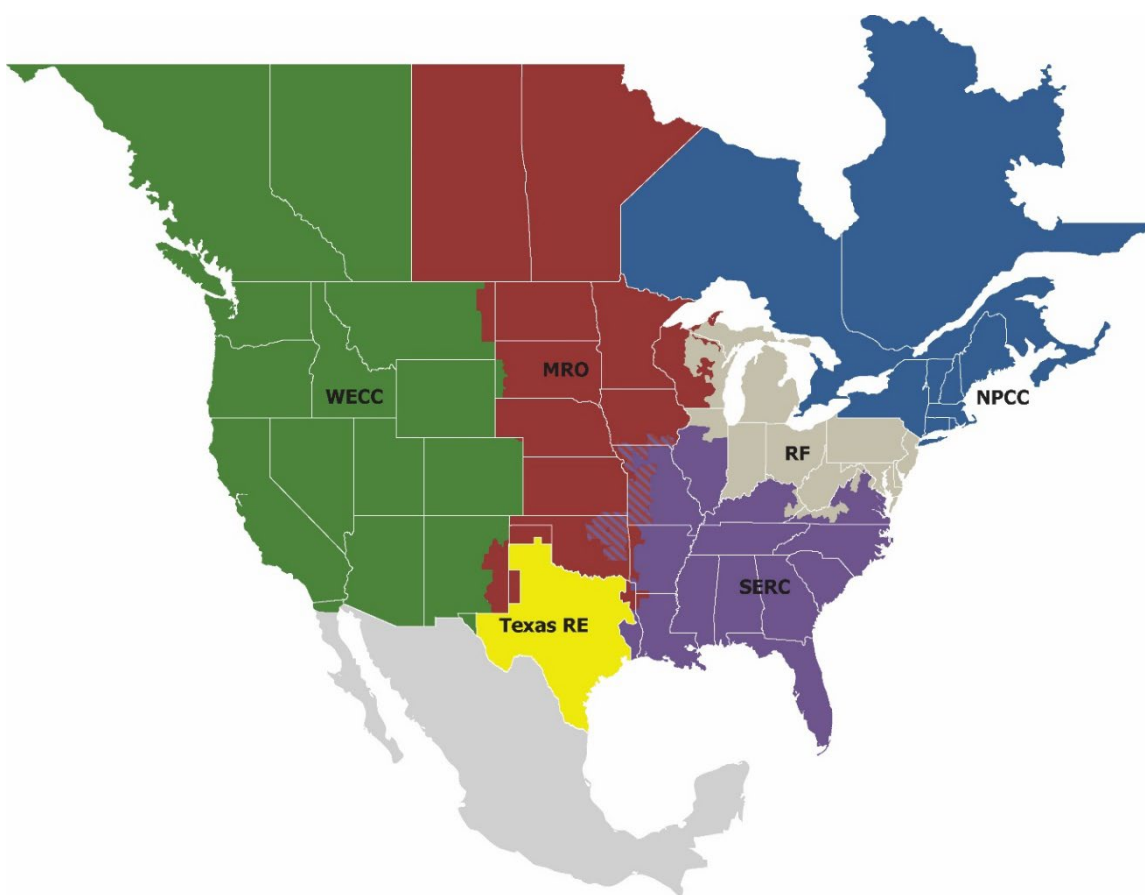
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Preface

Electricity is a key component of the fabric of modern society and the Electric Reliability Organization (ERO) Enterprise serves to strengthen that fabric. The vision for the ERO Enterprise, which is comprised of the North American Electric Reliability Corporation (NERC) and the six Regional Entities, is a highly reliable and secure North American bulk power system (BPS). Our mission is to assure the effective and efficient reduction of risks to the reliability and security of the grid.

Reliability | Resilience | Security
Because nearly 400 million citizens in North America are counting on us

The North American BPS is divided into six Regional Entity boundaries as shown in the map and corresponding table below. The multicolored area denotes overlap as some load-serving entities participate in one Region while associated Transmission Owners/Operators participate in another.



MRO	Midwest Reliability Organization
NPCC	Northeast Power Coordinating Council
RF	ReliabilityFirst
SERC	SERC Reliability Corporation
Texas RE	Texas Reliability Entity
WECC	Western Electricity Coordinating Council

Purpose

The purpose of this guide is to provide instruction to NERC credential maintenance providers on how to complete the Individual Learning Activity (ILA) form. The ILA form is used in evaluation of a course to determine if the course meets Credential Maintenance Program criteria. Providers should ensure accuracy in completing the form and verify its contents against criteria found in the *Credential Maintenance Program Administration Manual*¹. Errors or omissions in completion of the ILA form could result in approval delays or course denial.

The program criteria outline in the Credential Maintenance Program Administrative Manual takes precedence over any information presented in this user guide.

1

<https://www.nerc.com/pa/Train/SysOpCert/System%20Operator%20Certification%20DL/Credential%20Maintenance%20Program%20Administrative%20Manual%20v1.0.pdf>

Chapter 1: Locating and Generating a New ILA Form

Locating and Generating a New Form

The following pages show step-by-step instructions on how to access, generate, and submit a new ILA form.

Visit the System Operator Certification and Continuing Education Database (SOCCED) here:

<https://nerc-socced.useclarus.com> and log into your account.

Enter Username and Password.

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NERC Provider Portal

Home
Reset password
Create new profile

Please log in.

Username:

Password:

Login

Forgot your username or password? [Click here.](#)

To start the registration process, [fill out a basic profile.](#)

Note: If you already have a SOCCEd account, please do not complete a new profile. Please contact NERC at SOCCEdSupport@nerc.net for assistance with your login information.

If you're having technical problems, please email: soccedsupport@nerc.net

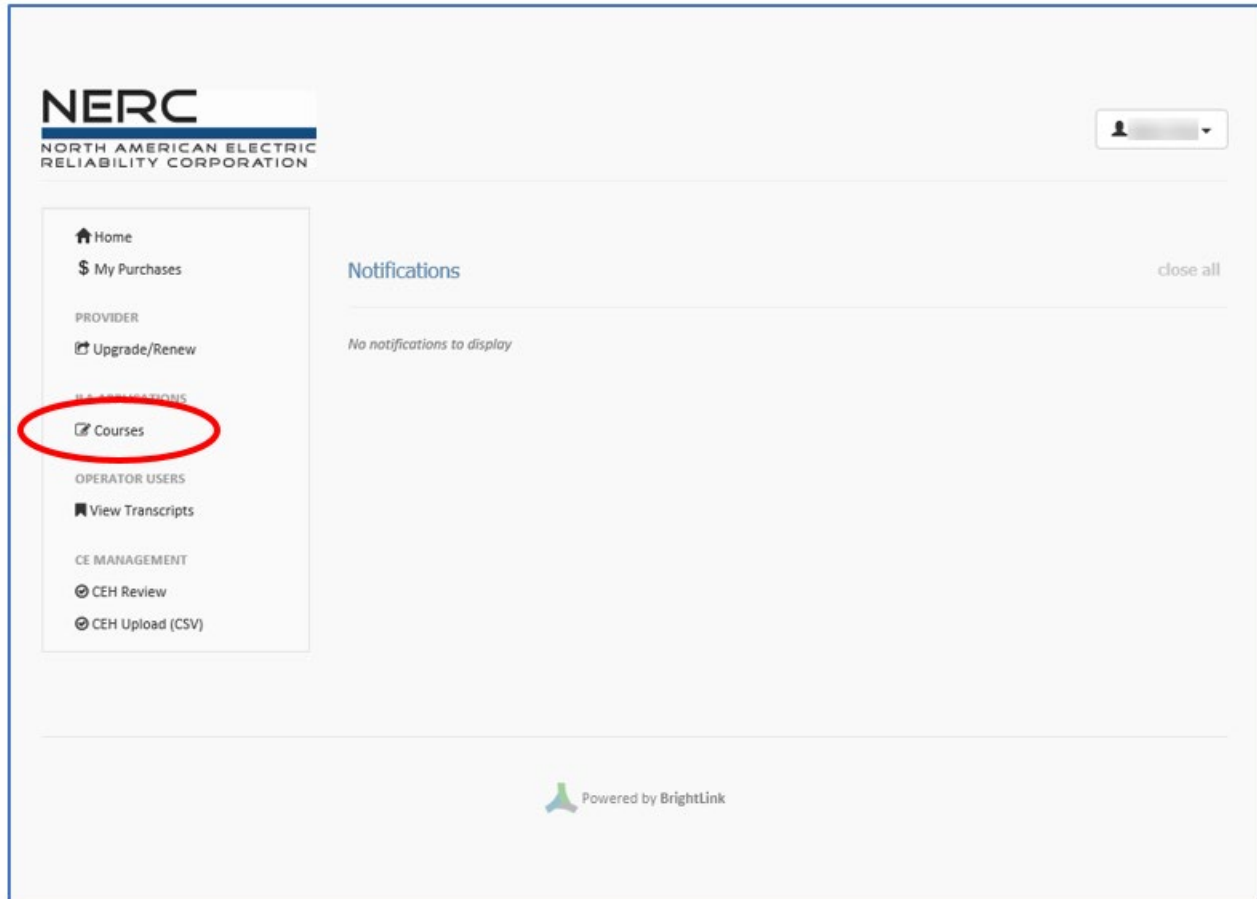
Powered by BrightLink

Chapter 2: ILA Application

Completing ILA Application Form

This section shows how to complete the ILA Application form.

Select Courses



Select ILA Application

The screenshot displays the NERC (North American Electric Reliability Corporation) ILA Applications dashboard. The interface includes a sidebar with navigation links such as Home, My Purchases, Upgrade/Renew, Courses, View Transcripts, and CEH Review/Upload. The main content area is titled 'ILA Applications' and features a '+ ILA Application' button circled in red. Below the title, there are controls for showing 10 entries, a CSV download button, a search bar, and a filter by status dropdown set to 'All Statuses'. A table lists application entries with columns for Course ID, Review/Application Status, Start Date, End Date, Operating topics/standards/Simulations, and Action. Each entry has a 'View Details' button. The table shows 10 entries, and the footer indicates 'Showing 1 to 10 of 249 entries' with a pagination control.

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Home
My Purchases

PROVIDER
Upgrade/Renew

ILA APPLICATIONS
Courses

OPERATOR USERS
View Transcripts

CE MANAGEMENT
CEH Review
CEH Upload (CSV)

ILA Applications

Show 10 entries CSV

Search:

Filter by status: All Statuses

Course ID:	Review/Application Status:	Start Date	End Date	Operating topics/standards/Simulations	Action
[Blurred]	[Blurred]	[Blurred]	[Blurred]	[Blurred]	View Details
[Blurred]	[Blurred]	[Blurred]	[Blurred]	[Blurred]	View Details
[Blurred]	[Blurred]	[Blurred]	[Blurred]	[Blurred]	View Details
[Blurred]	[Blurred]	[Blurred]	[Blurred]	[Blurred]	View Details
[Blurred]	[Blurred]	[Blurred]	[Blurred]	[Blurred]	View Details
[Blurred]	[Blurred]	[Blurred]	[Blurred]	[Blurred]	View Details
[Blurred]	[Blurred]	[Blurred]	[Blurred]	[Blurred]	View Details
[Blurred]	[Blurred]	[Blurred]	[Blurred]	[Blurred]	View Details
[Blurred]	[Blurred]	[Blurred]	[Blurred]	[Blurred]	View Details
[Blurred]	[Blurred]	[Blurred]	[Blurred]	[Blurred]	View Details

Showing 1 to 10 of 249 entries

Previous 1 2 3 4 5 ... 25 Next

Powered by BrightLink

Required Fields

* Indicates Required Field.

The screenshot shows the NERC (North American Electric Reliability Corporation) ILA Application form. The interface includes a navigation menu on the left with options like Home, My Purchases, Upgrade/Renew, Courses, and View Transcripts. The main content area is titled 'Contact Person For This Course' and 'Course Information'. Several fields are marked with a red asterisk to indicate they are required: 'Primary Contact' (a dropdown menu), 'Course ID' (a text input), 'Course Title' (a text input), 'Date for the first delivery of the course' (a date input), 'Operating Topics Hours' (a text input), 'NERC Standards' (a text input), and 'Simulation' (a text input). The 'Date for the first delivery of the course' field has a tooltip that says 'Enter date as YYYY-DD-MM'. At the bottom, there is a section 'This Course Includes' with a checkbox for 'This activity conforms to the criteria for System Operator Credential Maintenance as specified in the System Operator Certification Program Manual.' and buttons for 'Yes' and 'No'.

Primary Contact

1. Contact Person For This Course

- a. This is the individual who will answer questions a reviewer may have regarding the learning activity.
- b. This may or may not be the primary contact listed on the provider's account.

The screenshot shows a web interface for an ILA Application. At the top, there are two tabs: 'ILA Application' (which is active) and 'Application Documents'. Below the tabs, the main heading is 'Contact Person For This Course', which is highlighted by a red circle with the number '1'. Underneath this heading, there is a label 'Primary Contact *' followed by a dropdown menu. The dropdown menu currently displays the text 'Select one provider user' and has a small downward-pointing arrow on the right side.

Course Information

2. Course Information

a. Course ID

- i. Course ID must begin with provider ID (i.e. ABC_001).
- ii. During the provider application process, an entity is assigned a provider ID by NERC.
- iii. Must be unique to a single learning activity.
- iv. Cannot be edited once course has been entered into a transcript.

b. Course Title

- i. Course Title and Course ID may be the same.
 - ii. Must be unique to a single learning activity.
- c. Date for the first delivery of the course
- i. Date format must match: YYYY-DD-MM
 - ii. Refer to the Credential Maintenance Program Administrative Manual² for information regarding submission time frame requirements.

d. Course Description

- i. This field is not required; but, may be beneficial for internal requirements or for specialized learning activities (i.e. drills, field visits, etc.).
- ii. Refer to the Credential Maintenance Program Administrative Manual for information regarding specialized learning activities.

The screenshot shows a form titled "Course Information" with a red circle containing the number "2" next to the title. Below the title, there is a instruction: "Begin the course ID with the Provider ID." The form contains four fields:

- a** **Course ID ***: A text input field with the placeholder text "Do not use any special characters".
- b** **Course Title ***: A text input field with the placeholder text "Do not use any special characters".
- c** **Date for the first delivery of the course ***: A date input field with the placeholder text "Enter date as YYYY-DD-MM". Above this field is the instruction: "The course start date must be after your provider approval date."
- d** **Course Description**: A large, empty text area.

²

<https://www.nerc.com/pa/Train/SysOpCert/System%20Operator%20Certification%20DL/Credential%20Maintenance%20Program%20Administrative%20Manual%20v1.0.pdf>

Continuing Education Categories and Hours

3. **Continuing Education (CE) Categories and Hours** indicate what categories are included in each Learning Activity Content Segment.
 - a. **Operating Topics**
 - i. Should include total of all Learning Activity Content Segments.
 - ii. Minimum number of CE hours for a course must be at least 1.0.
 - iii. Fractional increment of an hour is rounded down to the next whole or half hour with a one hour minimum.
 - iv. Do not enter decimals or percentages.
 - v. Should relate to “Appendix A – Recognized Operator Training Topics” found in the System Operator Certification Program Manual.
 - b. **NERC Standards hours** cannot exceed **Operating Topics Hours**.
 - i. Time devoted to NERC Standards should be included in Operating Topics Hours; these hours are subsets of the total.
 - c. **Simulation hours** cannot exceed **Operating Topics Hours**.
 - i. Time devoted to Simulation should be included in Operating Topics Hours; these hours are subsets of the total.
 - d. Refer to the Credential Maintenance Program Administrative Manual³ for information regarding CE hours.

3 CE Categories & Hours

a	Operating Topics Hours *	<input type="text"/>
b	NERC Standards	<input type="text" value="0"/>
c	Simulation	<input type="text" value="0"/>

³<https://www.nerc.com/pa/Train/SysOpCert/System%20Operator%20Certification%20DL/Credential%20Maintenance%20Program%20Administrative%20Manual%20v1.0.pdf>

This Course Includes

- 4. This Course Includes:
 - a. This activity conforms to the criteria for System Operator Credential Maintenance as specified in the System Operator Certification Program Manual.
 - i. Select Yes or No.
 - b. This course is an Emergency Operations related training topic.**
 - i. Select Yes or No.
 - ii. Refer to the System Operator Certification Manual “Appendix A – Recognized Operator Training Topics”⁴ for a list of topics which will determine if subject matter qualifies for Emergency Operations related training topic.
 - c. Pilot data is attached, if applicable.**
 - i. Select Yes, No, or N/A.
 - ii. Providers are responsible for maintaining Pilot data documentation on active courses.
 - iii. This documentation does not transfer upon course renewal and should be uploaded to renewed course each year.
 - iv. Refer to the Credential Maintenance Program Administrative Manual⁵ for information regarding determination of total CE hours for eligible learning activities.

4 This Course Includes

a This activity conforms to the criteria for System Operator Credential Maintenance as specified in the System Operator Certification Program Manual. Yes No

b This course is an Emergency Operations related training topic. Yes No

c Pilot data is attached, if applicable. Yes No N/A

⁴ https://www.nerc.com/pa/Train/SysOpCert/System%20Operator%20Certification%20DL/SOC_Program_Manual_v4.pdf

⁵ <https://www.nerc.com/pa/Train/SysOpCert/System%20Operator%20Certification%20DL/Credential%20Maintenance%20Program%20Administrative%20Manual%20v1.0.pdf>

Learning Assessment/Course Evaluation and Attendance Verification

5. How will the learning be assessed? Learning Assessment measures the extent to which training achieved its objectives and improved learner’s knowledge or skills. Select all that apply.
 - a. **Written/Online Exam**
 - b. **Performance Demonstration**
 - c. **Other**
 - d. **If other, please describe.**
- e. If learning assessments are not **Written/Online Exam** or **Performance Demonstration**, select **Other**.
- f. Include enough detail to clearly explain assessment process.
- g. Refer to the Credential Maintenance Program Administrative Manual⁶ for information regarding requirements for learning assessment.

Learning Assessment/Course Evaluation and Attendance Verification

5 How will the learning be assessed?

Written/Online Exam

Performance Demonstration

Other

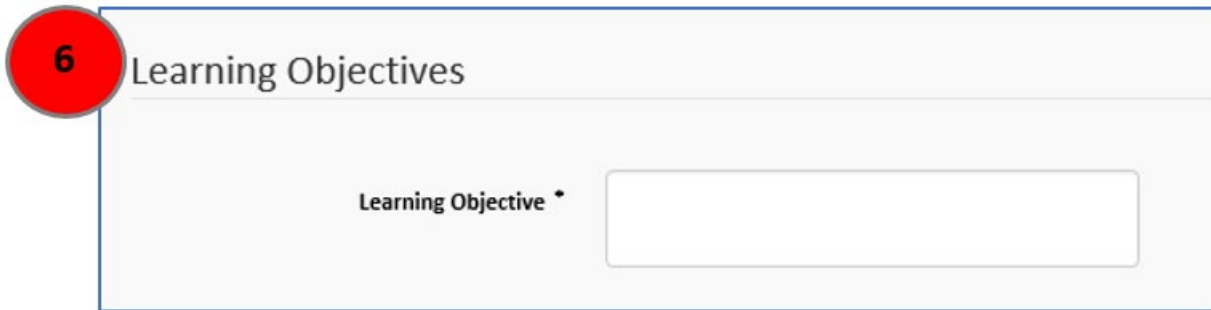
If other, please describe.

⁶

<https://www.nerc.com/pa/Train/SysOpCert/System%20Operator%20Certification%20DL/Credential%20Maintenance%20Program%20Administrative%20Manual%20v1.0.pdf>

Learning Objectives

6. Learning Objectives must have clear and concise written statements of intended learning.
 - a. These objectives represent what trainees are expected to achieve based on learning activities.
 - b. Include all intended objectives in this field.
 - c. Individual Objective(s) will be assigned to each Learning Activity Content Segment(s) in the next section.
 - d. For clarification, assign a number to each objective.
 - e. Refer to Guide to Writing Objectives on the One Stop Shop⁷ of the System Operator Certification and Credential Maintenance Program⁸ website regarding additional information.



The image shows a screenshot of a form. On the left side, there is a red circle containing the number '6'. To the right of this circle, the text 'Learning Objectives' is displayed. Below this title, there is a text input field. To the left of the input field, the text 'Learning Objective *' is written, indicating that this field is required.

⁷ [One-Stop Shop \(System Operators Certification and Credential Maintenance Program\) \(nerc.com\)](http://www.nerc.com)

⁸ [System Operator Certification & Credential Maintenance Program \(nerc.com\)](http://www.nerc.com)

Segment Categories

7. Segment Categories indicate what categories are included in each segment.
 - a. **Operating Topics** should include all segments related to the System Operator Certification Manual “Appendix A – Recognized Operator Training Topics”⁹.
 - b. **NERC Standards** should include segments addressing these Standards.
 - c. **Simulations** indicates segment is based on simulation.
 - d. A segment may cover multiple categories.
 - e. Select all categories that apply.

7 Segment Categories

Please select all that apply.

a Operating Topics

b NERC Standards

c Simulations

⁹ https://www.nerc.com/pa/Train/SysOpCert/System%20Operator%20Certification%20DL/SOC_Program_Manual_v4.pdf

Learning Activity Content Segment

8. Learning Activity Content Segment

- a. **Partial Credit Available?** Select applicable Yes or No.
 - i. Refer to the Credential Maintenance Program Administrative Manual¹⁰ regarding Partial Credit.
- b. **Learning Objective(s) related to each segment**
 - i. List each objective(s) relative to Segment Delivery Description.
 - ii. This is where numbering of objectives is beneficial.
- c. **Segment Duration in minutes**
 - i. Enter total allocated times for each segment of learning activity.
 - ii. Do not enter decimals or percentages.
 - iii. Total of all Segment Duration should not be greater than Operating Topic Hours (3.a).
 - iv. A ten minute break is understood to be part of each CEH.
- d. **Segment Delivery Description**
 - i. Include enough detail to determine if learning objectives can be met.
 - ii. Include method of delivery and description of all materials used to deliver the course.
 - iii. Provide specific information on how content of this course relates to the System Operator Certification Manual "Appendix A – Recognized Operator Training Topics"¹¹.

8

Learning Activity Content Segment

a

Partial Credit Available?

Yes	No
-----	----

b

Learning Objective(s) related to each segment

c

Segment Duration in minutes

Briefly describe the information conveyed in each segment of the learning activity. Include instructional method(s) and describe all materials used in course delivery. The description **MUST** contain sufficient detail to determine if the learning objectives can be met. Provide specific information on how the content of this course relates to the System Operator Certification Program Manual, Appendix A.

d

Segment Delivery Description

¹⁰

<https://www.nerc.com/pa/Train/SysOpCert/System%20Operator%20Certification%20DL/Credential%20Maintenance%20Program%20Administrative%20Manual%20v1.0.pdf>

¹¹ https://www.nerc.com/pa/Train/SysOpCert/System%20Operator%20Certification%20DL/SOC_Program_Manual_v4.pdf

Add More Learning Activity Content Segments

9. If additional segments need to be added:
 - a. Click + Add in the upper right corner.
 - b. Continue to include required information as described above.
 - i. Description of Segment Delivery – See 8.d
 - ii. Segment Categories – See 7.a, 7.b, 7.c
 - iii. Partial Credit Available? – See 8.a
 - iv. Learning Objective(s) related to each segment – See 8.b
 - v. Segment Duration in minutes – See 8.c
 - c. Continue to add as many Learning Activity Content Segments as needed.
 - d. Before submitting the course, ensure all Segment Duration minutes equal total Operating Topic Hours.

9

Add More Learning Activity Content Segments

a
+ Add

✕

Briefly describe the information conveyed in each segment of the learning activity. Include instructional method(s) and describe all materials used in course delivery. The description MUST contain sufficient detail to determine if the learning objectives can be met.

Description of Segment Delivery *

Please select all that apply.

Operating Topics

NERC Standards

Simulations

Partial Credit Available?

Learning Objective(s) related to each segment

Segment Duration in minutes

Course Topics

- 10. Course Topics relate specifically to the System Operator Certification Manual “Appendix A – Recognized Operator Training Topics”¹².
 - a. Select all that apply.
 - b. Courses that provide CE hours for NERC certification credential maintenance shall be based on topics listed.

10

Course Topics

Basic AC/DC Electricity

- Capacitance
- Inductance
- Impedance
- Real and reactive power
- Electrical Circuits
- Magnetism

Basic Power System Mathematic Concepts

- Basic trigonometry
- Ratios
- Per unit values
- Pythagorean Theorem
- Ohm's Law

¹² https://www.nerc.com/pa/Train/SysOpCert/System%20Operator%20Certification%20DL/SOC_Program_Manual_v4.pdf

Course Topics

Basic AC/DC Electricity

- Capacitance
- Inductance
- Impedance
- Real and reactive power
- Electrical Circuits
- Magnetism

Basic Power System Mathematic Concepts

- Basic trigonometry
- Ratios
- Per unit values
- Pythagorean Theorem
- Ohm's Law
- Kirchhoff's Laws

Characteristics of the Bulk Electrical System

- Transmission lines
- Transformers
- Substations
- Power plants
- Protection
- Introduction to power system operations and interconnected operations

System Protection Principles

- Transmission lines
- Transformers
- Busses
- Generators
- Relays and protection schemes
- Power system faults
- Synchronizing equipment under-frequency load shedding
- Under-voltage load shedding
- Communication systems utilized

Interconnected Power System Operators

- Voltage control
- Frequency control
- Power system stability
- Facility outage both planned and unplanned
- Energy accounting
- Inadvertent energy
- Time error control
- Balancing of load and resources

Emergency Operations

- Loss of generation resource(s)
- Loss of transmission element(s)
- Operating reserves
- Contingency reserves
- Line loading relief
- Load shedding
- Voltage and reactive flows during emergencies
- Loss of EMS
- Loss of primary control center

Power System Restoration

- Restoration philosophies
- Facility restoration priorities
- Blackstart restoration
- Stability (angle and voltage)
- Islanding and synchronizing

Market Operations

- NAESB standards
- Standards of conduct
- Tariffs
- OASIS applications (Transmission Reservations)
- E-Tag application
- Transaction scheduling
- Market applications
- Interchange

Tools

- Supervisory Control and Data Acquisition (SCADA)
- Automatic Generation Control (AGC) application
- Power flow application
- State estimator application
- Contingency analysis application
- P-V Curves
- Load forecasting application
- Energy accounting application
- Voice and data communications systems
- Demand-side management programs

Operator Awareness

- Identifying loss of facilities
- Recognizing loss of communication facility
- Recognizing telemetry problems
- Recognizing and identifying contingency problems
- Proper communications (three-part)
- Communication with appropriate entities including the Reliability Coordinator
- Cyber and physical security and threats

- c. Save the ILA Form.
- d. Once the ILA Form is saved, the following screen should appear.

The screenshot displays a form with two main sections: "Policies and Procedures" and "NERC Reliability Standards". Under "Policies and Procedures", there are three unchecked checkboxes: "ISO/RTO operational and emergency policies and procedures", "Regional operational and emergency policies and procedures", and "Company-specific operational and emergency policies and procedures". Under "NERC Reliability Standards", there is one unchecked checkbox: "Application and/or implementation of NERC Reliability Standards". At the bottom center of the form, there is a blue "Save" button, which is circled in red.

Chapter 3: Application Documents

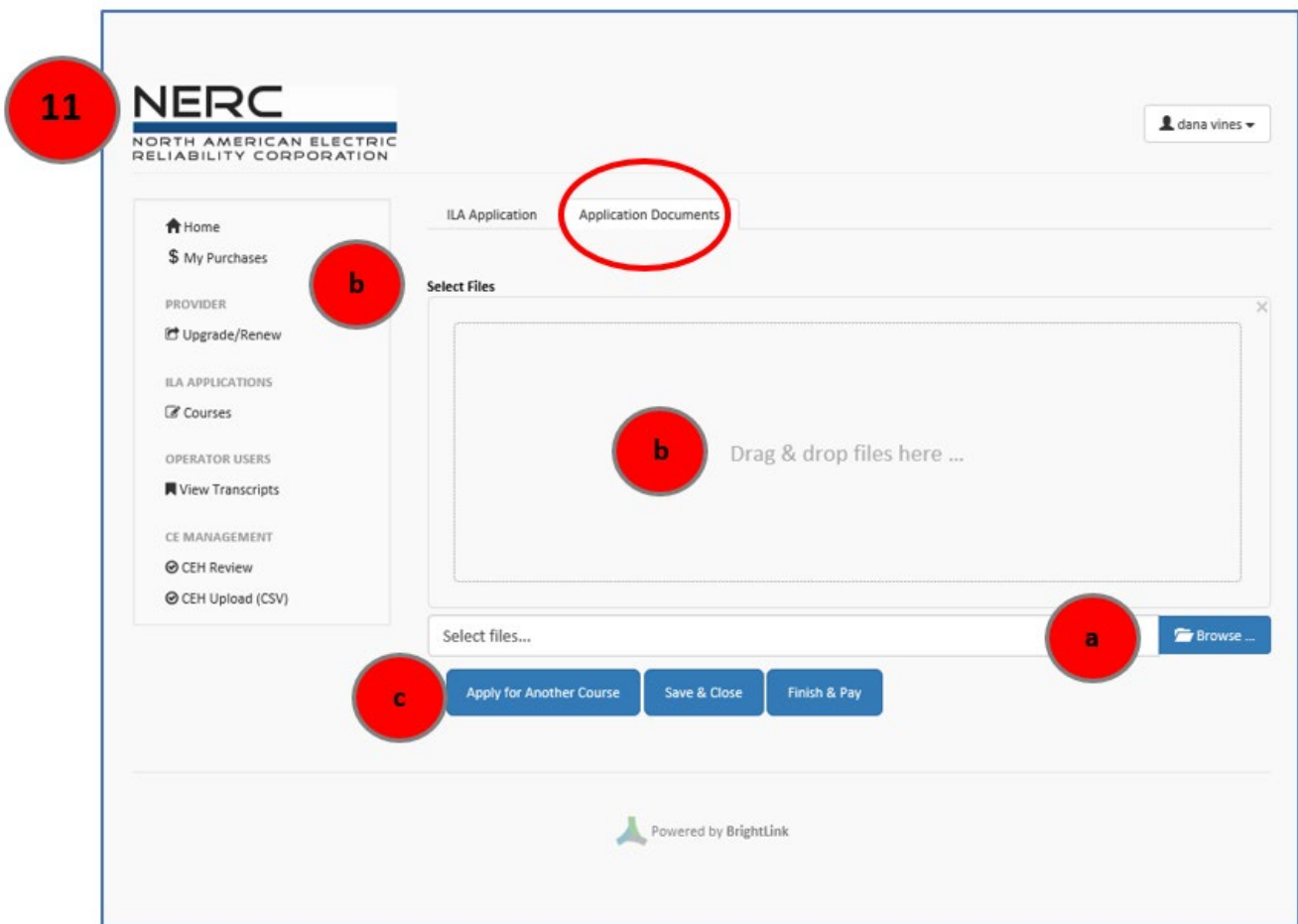
Required Application Documents

11. Application Documents refer to anything required to complete the ILA Form (i.e. Pilot test data). Refer to the Credential Maintenance Program Administrative Manual¹³ for more information concerning pilot test documentation.

- a. There are two methods to upload documents to the ILA.
 - i. Search for files by using the Browse button
 - ii. Drag & drop files as applicable.

These instructions may also be used when asked to upload other documents (i.e. Continuing Education Review Panel (CERP) Audit Requests.)

- b. When finished, choose one of the following 3 options:
 - i. Apply for Another Course. The website will return to a blank ILA Form.
 - ii. Save & Close. The website will close browser but may be returned to later.
 - iii. Finish & Pay.



13

<https://www.nerc.com/pa/Train/SysOpCert/System%20Operator%20Certification%20DL/Credential%20Maintenance%20Program%20Administrative%20Manual%20v1.0.pdf>

Appendix A: Version History

Version History

This is example text that you can use for proper formatting; delete or replace before publication.

Table A.1: Provider User Guide Version History		
Date	Description	Version
2/11/2021	Provider User Guide: Completing an Individual Learning Activity Form – Approved by the Personnel Certification and Governance Committee	1.0
1/1/2023	Added Note in Chapter 2 regarding Pilot Data. Updated links to the System Operator Certification Program Manual Updated links to the Credential Maintenance Program Administrative Manual	1.1