	© ISO New England, Inc. 2024	Master/LCC Procedure No. 17 - ISO and Local Control Center Training
		Revision Number: 9.1 Revision Date: May 9, 2024
Owner: Manager, Operations Training and Procedures		Approved by: M/LCC Heads
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Master/ Local Control Center Procedure No. 17

(M/LCC 17)

ISO and Local Control Center Training

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1. References

NERC Reliability Standard EOP-005- System Restoration from Blackstart Resources

NERC Reliability Standard PER-003 - Operating Personnel Credentials

NERC Reliability Standard PER-005 - Operations Personnel Training

NERC Credential Maintenance Program Administrative Manual


Master/Local Control Center Procedure No. 12 - Identification and Coordination of ISO and LCC TOP Responsibilities (M/LCC 12)

2. Background

Joint ISO New England (ISO)/Local Control Center (LCC) training efforts have historically been undertaken to provide the following:

1. Coordination of continuing training activities for ISO and LCC operators that address US Federal Energy Regulatory Commission (FERC), North American Electric Reliability Corporation (NERC), Northeast Power Coordinating Council, Inc. (NPCC), ISO, and LCC policies, procedures, guidelines, standards, and instructions.
2. Instruction and information dissemination that provides consistent expectations and reinforces the operational philosophy set forth by the Master/Local Control Center (M/LCC) Heads.
3. An environment that provides ISO and LCC operators an opportunity to interact and discuss common operational issues, promoting more efficient system operation and improved teamwork.

This procedure establishes necessary protocols to leverage ISO/LCC Joint Training as an avenue for increased cross-organizational cohesiveness and alignment.

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3. Definitions

Coordinated Exercise - An exercise with events or system conditions that require an interactive response from ISO and one or more LCCs.

Course Pilot - Course implementation that occurs prior to delivery in its scheduled Training Cycle.

Instructional Package - A package consisting of a Lesson Plan, assessments, and instructional materials (e.g., presentations, handouts, trainee worksheets, as appropriate).

ISO-LCC Long Range Training Schedule - A three-year rolling schedule, updated by the JTTF and approved by the M/LCC Heads, that identifies Joint Training courses, Coordinated Exercises, and the Training Cycle in which each is scheduled to be delivered.

Joint Trainers Task Force (JTTF) - A task force comprised of training organization representatives from ISO and each of the LCCs.


Joint Training - Training implemented jointly by the ISO and one or more LCCs to address common learning objectives that, where applicable, use a single Individual Learning Activity (ILA).

Responsible Instructor - The ISO or LCC instructor assigned responsibility for designing, developing, and implementing Joint Training.

Training Cycle - A block of time wherein a discrete set of course topics is presented on a recurring, weekly basis.

4. Applicability

This procedure is applicable to ISO and LCC Joint Training and Coordinated Exercises.

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5. Responsibilities

5.1 M/LCC Heads

1. Review and approve the ISO-LCC Long Range Training Schedule for the following year, prior to October 1st of each year.
2. Provide direction to JTTF members on potential Joint Training courses and Coordinated Exercises.
3. Provide feedback on instructional materials submitted by Responsible Instructors to ensure they meet expectations.

5.2 Joint Trainers Task Force


JTTF responsibilities are delineated in the JTTF Charter (Attachment A).

5.3 Manager, OTP (or designee)

1. Ensures coordination and implementation of Joint Training and Coordinated Exercises occur as scheduled.
2. Ensures timely completion of instructional material preparation.
3. Ensures a Course Pilot is conducted.
4. Dispositions course attendance, conduct, or performance issues.

5.4 Responsible Instructor

1. Creates and submits a course outline to the JTTF two months prior to the first scheduled delivery of an assigned course.
2. Creates and submits instructional materials to the M/LCC Heads one month prior to the first scheduled delivery of an assigned course.

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6. Procedure

6.1 Scheduling

The ISO/LCC Long Range Training Schedule is developed using guidance in the JTTF Charter (Attachment A).

6.2 Design and Development

1. The Responsible Instructor shall:
 - A. Create a course outline containing:
 - 1) A goal statement or terminal objective.
 - 2) A sequence of topic content items.
 - 3) An estimated number of Continuing Education (CE) Hours to be awarded (if applicable).
 - 4) A statement of how learning will be assessed.
 - 5) A statement of the assessment completion time requirements for learners to be eligible for course credit.
 - B. Submit outline to the JTTF for review at least two months prior to the first scheduled delivery of the course.
2. The Responsible Instructor shall create an Instructional Package containing:
 - A. Lesson Plan - Must detail how each learning objective shall be covered during course implementation.
 - B. Assessment(s) – Must meet the following requirements:
 - 1) Address all learning objectives covered by the Lesson Plan.
 - 2) Be constructed in such a way that no psychometric errors are present.
 - 3) Written assessments contain a minimum of 8 points and have passing criteria of $\geq 75\%$.
 - C. Instructional Materials - Consist of presentations, handouts, worksheets, and any other form of media used during course delivery.

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NOTE

The Course Pilot is conducted in the same manner as during the cycle.

3. Unless otherwise agreed to with the Manager, OTP, the Responsible Instructor conducts a Course Pilot prior to the first delivery of the course during a Training Cycle.
 - A. When possible, instructors from ISO and LCC(s) participate in the Course Pilot.
 - B. Attendees provide feedback regarding any identified discrepancies to allow for increased instructional effectiveness.
 - C. Prior to the delivery and based on feedback, the Instructional Package may be adjusted to ensure consistent delivery.

6.3 Implementation


Course Delivery

- A. The Responsible Instructor delivers the course in accordance with the corresponding Instructional Package.

NOTE

Deviations from assessment completion time-frame requirements may be granted for extenuating circumstances only and, when possible, should be pre-approved.

- B. Learners attend and successfully complete the course to receive credit. In the event that a learner is unable to attend the entire course, the learner shall retake the course or make up any missed portions with the Responsible Instructor, an alternate instructor, or when appropriate, with Manager, OTP (or designee), if time permits.
- C. To receive credit, learners successfully complete course assessment(s) and/or remediation, as soon as practicable after completion of each course, but no later than the dates communicated at the time of course delivery.
 - 1) A one-week extension may be granted by the Responsible Instructor on a case-by-case basis.
 - 2) Extensions greater than one week are approved by the applicable M/LCC Head and the JTTF Chair.
 - 3) Where possible, learners not meeting the passing criteria for an assessment undergo remediation.


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6.4 Course Evaluation

1. The Responsible Instructor and the JTTF use course feedback and assessment results to adjust and improve existing and future course deliveries.
2. Feedback is collected using individual feedback forms, discussions, and/or management observations.


6.5 Awarding NERC CE Hours

All activities associated with NERC CE Hours comply with the guidelines provided in the NERC Credential Maintenance Program Administrative Manual.

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7. Revision History

Rev. No.	Date	Reason
0	12/03/09	Initial draft
1	02/01/10	Added SOP titles to Section 1 References, Section 5.4 step F, and to Section 6.5
2	07/18/11	Biennial review by procedure owner; Globally changed all document fonts to Arial; Globally changed OPTD to OPTI to reflect group & Manager, OPTI re-title and added SAT Manager; Section 1 added EOP-005, RTMKTS.0200.005; Section 2 defined acronym LCC, in 1 st bullet replaced refresher with continuing, in 2 nd paragraph replaced jointly with together & added new last sentence, and reorganized definitions into alphabetical order & added definitions for reliability subject matter expert and related task; Section 4 replaced "Joint ISO/LCC" with "Inter-Control Center" Sections 5 & 6 major re-write to reflect organizational changes and changes in current practices and management expectations, clarified text related to M/LCC Heads & JTTF responsibilities for requesting & reviewing training, replaced "anchored essay" with fill in the blank for allowable test question types, and clarified M/LCC Heads & JTTF responsibilities for requesting & reviewing training; Retired Attachment B; Added new Attachment I and new Attachment J
3	07/13/13	Biennial review by procedure owner. Modified Title; Section 1: Removed References to SOP-RTMKTS.0200.0005, SOP-RTMKTS.0200.0025 and SOP-RTMKTS.0200.0070. Section 2: Added language for clarity. Section 3: Removed definitions that are no longer applicable, added new definitions and modified definitions for clarity. Section 4: Rewritten. Section 5: Edited to use new definitions and remove the use of deleted definitions. Added a new Section 6.1. Major rewrite to Section 6.2, 6.3 and 6.4. Modified Attachment C. Retire Attachments E, F, G, H, I and J.
4	05/07/14	Globally changed ISO SAT Manager to ISO SAT Reviewer; defined SAT Reviewer role.
5	07/08/15	Biennial review by procedure owner; Updated content to be consistent with current practices and management expectations;
6	04/19/17	Biennial review by procedure owner; Added required corporate document identity to all page footers; Globally made editorial changes to be consistent with current practices and management expectations; Added a responsibility for MLCC Heads; Added a responsibility for a Responsible Instructor
7	12/06/18	Biennial review by procedure owner; Major re-write to clarify requirements and be consistent with current practices and management expectations;
8	10/30/20	Biennial review by procedure owner; Corrected NERC Credential Maintenance Administrative Manual reference; Changed Training Pilot to Course Pilot in Definitions section; Deleted note in section 5.2; Moved note and step 3 from section 6.3 to section 6.2;
9	05/24/22	Biennial review by procedure owner; Globally updated for minor grammatical changes
9.1	05/09/24	Biennial review by procedure owner with no intent changes required; Minor grammar change.

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8. Attachments

Attachment A - Joint Trainers Task Force Charter

Attachment B - Retired (07/18/11)

Attachment C - Retired (12/06/18)

Attachment D - Retired (07/08/15)

Attachment E - Retired (07/13/13)

Attachment F - Retired (07/13/13)

Attachment G - Retired (07/13/13)

Attachment H - Retired (07/13/13)

Attachment I - Retired (07/13/13)

Attachment J - Retired (07/13/13)