

NERC Applicable Course Listing

300 Electrical Distribution and Transmission

301 Distribution Systems

- 301-02 Electrical Distribution System Fundamentals - 1.5 CEHs
- 301-03 Primary and Secondary Distribution Systems - 1.5 CEHs
- 301-04 Distribution System Components and Application - 1.0 CEHs
- 301-05 Characteristics of Distribution Switchgear - 1.0 CEHs
- 301-06 Load Characteristics and Management - 1.5 CEHs
- 301-07 Principles of Revenue Metering - 1.5 CEHs
- 301-08 Single and Poly-phase Metering

345 Introduction to NERC

- 345-01 Overview for Generator Operators

350 System Protection

- 350-01 Elements of System Protection - 2.5 CEHs
- 350-02 Types of Protective Relays - 2.5 CEHs
- 350-03 Monitoring System Conditions - 2.5 CEHs
- 350-04 Disturbance Monitoring Equipment - 2.0 CEHs
- 350-05 Line Protection - 1.0 CEHs
- 350-06 Transformer Protection - 1.0 CEHs
- 350-07 Pilot Protection - 1.0 CEHs
- 350-09 Bus Protection - 1.5 CEHs
- 350-10 Generator Protection - 2.5 CEHs
- 350-11 Protection System Misoperation - 1.5 CEHs
- 350-12 Protection Systems Maintenance Programs - 2.0 CEHs

375 Resource and Demand Balancing

- 375-01 Real Power Balancing Control Performance - 2.0 CEHs
- 375-02 Disturbance Control Performance - 2.0 CEHs
- 375-03 Frequency Response and Bias - 2.0 CEHs
- 375-05 Automatic Generation Control - 3.0 CEHs

376 Communications

- 376-01 Bulk Power System Communication Basics - 1.0 CEHs
- 376-02 Bulk Power System Communication and Coordination - 2.0 CEHs
- 376-04 Power Line Carrier Equipment and Applications (TBD)

377 Critical Infrastructure Protection

- 377-01 CIP Personnel Responsibilities - 1.0 CEHs
- 377-02 CIP Perimeters and Configurations - 1.0 CEHs
- 377-03 CIP Controls and Management - 1.0 CEHs
- 377-04 CIP Related BES Recovery Plans - 1.0 CEHs
- 377-05 CIP Physical Security - 1.0 CEHs



- 378 Emergency Operations Planning
 - 378-01 Emergency Policies and Procedures - 1.5 CEHs
 - 378-02 Capacity and Energy Emergencies - Pending
 - 378-04 Disturbance Reporting - Pending

381 Interconnection Reliability Operations and Coordination

- 381-05 Reliability Coordination - Planning & Ops - 1.5 CEHs
- 381-06 Coordinating Entities and Duties - Pending

386 Transmission Operations

- 386-01 Reliability Responsibilities and Authorities - Pending

387 System Operations

- 387-01 Energy Production and Transfers - 1.5 CEHs
- 387-02 Transmission Operations - 2.5 CEHs
- 387-03 Economic Power System Operations - Pending
- 387-04 Power System Control Elements - Pending
- 387-05 Interconnected Energy Accounting - Pending
- 387-06 Power System Telemetry and Telemetering Methods (TBD)
- 387-07 Supervisory Control and Data Acquisition (SCADA) Systems Basics (TBD)
- 387-08 Factors of Power System Reliability (TBD)
- 387-09 Power System Stability and Protection Fundamentals (TBD)
- 387-10 Power System Restoration (In Production)

388 Voltage and Reactive

- 388-01 Active and Reactive Power Fundamentals (In Production)
- 388-02 Active and Reactive Power Limits and Flows (In Production)

400 Electrical Maintenance

417 Switchgear Maintenance

- 417-01 Switchgear - 2.0 CEHs
- 417-02 Low Voltage Breakers - 1.0 CEHs
- 417-03 Medium and High Voltage Switchgear - 2.0 CEHs
- 417-04 General Switchgear Maintenance - 1.5 CEHs

500 Power Generating Systems and Operations

505 Turbine Auxiliaries and Control

- 505-02 Steam Turbine Control and Operation - 1.5 CEHs

507 Generator and Auxiliary System and Control

- 507-01 Generator and Auxiliary Systems' Functionality - 1.0 CEHs
- 507-03 Generator Construction and Process Control - 1.0 CEHs

560 Plant Electrical Systems

- 560-01 Main Transformers - 1.5 CEHs
- 560-04 Protective Relays and Instrument Transformers - 1.0 CEHs

561 Unit Start-up and Shutdown

- 561-01 Preparing for Power Plant Start-ups - 1.5 CEHs

Total NERC Approved CEHs: 65.5

Updated September 7, 2018

NERC Continuing Education Hours

Course	Title	CEHs	Operating	Standards	Simulations
301-02	Electrical Distribution System Fundamentals	1.5	1.5	0	0
301-03	Primary and Secondary Distribution Systems	1.5	1.5	0	0
301-04	Distribution System Components and Application	1.0	1.0	0	0
301-05	Characteristics of Distribution Switchgear	1.0	1.0	0	0
301-06	Load Characteristics and Management	1.0	1.0	1.0	0
301-07	Principles of Revenue Metering	1.5	1.5	0	0
350-01	Elements of System Protection	2.5	2.5	1.0	0
350-02	Types of Protective Relays	2.5	2.5	0.5	0
350-03	Monitoring System Conditions	2.5	2.5	0.5	0
350-04	Disturbance Monitoring Equipment	2.0	2.0	1.0	0
350-05	Line Protection	1.0	1.0	1.5	0
350-06	Transformer Protection	1.0	1.0	0	0
350-07	Pilot Protection	1.0	1.0	0	0
350-09	Bus Protection	1.5	1.5	0	0
350-10	Generator Protection	2.5	2.5	2.0	0
350-11	Protection System Misoperation	1.5	1.5	1.0	0
350-12	Protection System Maintenance Programs	2.0	2.0	1.0	0
375-01	Real Power Balancing Control Performance	2.0	1.0	1.0	0
375-02	Disturbance Control Performance	2.0	2.0	1.0	0
375-03	Frequency Response and Bias	2.0	2.0	1.0	0
375-05	Automatic Generation Control	3.0	3.0	1.0	0
376-01	Bulk Power System Communication Basics	1.0	1.0	1.0	0
376-02	Bulk Power System Communication and Coordination	2.0	2.0	2.0	1.0
377-01	CIP Personnel Responsibilities	1.0	1.0	1.0	0
377-02	CIP Perimeters and Configurations	1.0	1.0	1.0	0
377-03	CIP Controls and Management	1.0	1.0	1.0	0
377-04	CIP Related BES Recovery Plans	1.0	1.0	1.0	0
377-05	CIP Physical Security	1.0	1.0	1.0	0
378-01	Emergency Policies and Procedures	1.5	1.5	1.5	0
381-05	Reliability Coordination - Planning and Operations	1.5	1.5	0	0
387-01	Energy Production and Transfers	1.5	1.5	1.5	0
387-02	Transmission Operations	2.5	2.5	1.0	0
417-01	Switchgear	2.0	2.0	0	0
417-02	Low Voltage Breakers	1.0	1.0	0	0
417-03	Medium and High Voltage Switchgear	2.0	2.0	0	0
417-04	General Switchgear Maintenance	1.5	1.5	0	0
505-02	Steam Turbine Control and Operation	1.5	1.5	0	0
507-01	Generator and Auxiliary Systems' Functionality	1.0	1.0	1.0	0
507-03	Generator Construction and Process Control	1.0	1.0	1.0	0
560-01	Main Transformers	1.5	1.5	1.5	0
560-04	Protective Relays and Instrument Transformers	1.0	1.0	0	0
561-01	Preparing for Power Plant Start-ups	1.5	1.5	1.5	0
	Total CEHs	65.5	64.5	30.5	1.0