

## NERC Applicable Course Listing

### 300 Electrical Distribution and Transmission

#### 301 Distribution Systems

- 301-02 Electrical Distribution System Fundamentals - 2.0 CEHs
- 301-03 Primary and Secondary Distribution Systems – 2.0 CEHs
- 301-04 Distribution System Components and Application - 1.5 CEHs
- 301-05 Characteristics of Distribution Switchgear - 1.5 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 - 1.0 CEHs

#### 345 Introduction to NERC

- 345-01 Overview for Generator Operators - 2.0 CEHs

#### 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 - 3.0 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 Communications and Coordination - 2.5 CEHs

#### 377 Critical Infrastructure Protection

- 377-01 CIP Personnel Responsibilities - 1.0 CEHs
- 377-02 CIP Perimeters and Configurations - 1.0 CEHs
- 377-03 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

#### 381 Interconnection Reliability Operations and Coordination

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

#### 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 – 2.0 CEHs
- 387-04 Power System Control Elements - 1.5 CEHs
- 387-05 Interconnected Energy Accounting - 2.0 CEHs
- 387-06 Power System Telemetry and Telemetry Methods (TBD)
- 387-07 Supervisory Control and Data Acquisition (SCADA) Systems Basics – 2.0 CEHs
- 387-08 Factors of Power System Reliability (TBD)
- 387-09 Power System Stability and Protection Fundamentals (TBD)
- 387-10 Power System Restoration - 2.0 CEHs

#### 388 Voltage and Reactive

- 388-01 Active and Reactive Power Fundamentals - 2.0 CEHs
- 388-02 Active and Reactive Power Limits and Flows - 2.0 CEHs

### 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: 87.5**

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NERC Course ID	Title	CEHs	Operating	Standards	Simulations	EOP
MTS_4625_301-02	Electrical Distribution System Fundamentals	2.0	2.0	0	1.0	
MTS_4625_301-03	Primary and Secondary Distribution Systems	2.0	2.0	0	0	
MTS_4625_301-04	Distribution System Components and Application	1.5	1.0	0	0	
MTS_4625_301-05	Characteristics of Distribution Switchgear	1.5	1.5	0	0	
MTS_4625_301-06	Load Characteristics and Management	1.5	1.0	1.0	0	
MTS_4625_301-07	Principles of Revenue Metering	1.5	1.5	0	0	
MTS_4625_301-08	Single and Poly-phase Metering	1.0	1.0	0	0	
MTS_4625_345-01	NERC Overview and Application for Generator Operators	2.0	2.0	2.0	0	
MTS_4625_350-01	Elements of System Protection	2.5	2.5	1.0	0	
MTS_4625_350-02	Types of Protective Relays	2.5	2.5	0.5	0	
MTS_4625_350-03	Monitoring System Conditions	2.5	2.5	0.5	0	
MTS_4625_350-04	Disturbance Monitoring Equipment	2.0	2.0	1.0	0	
MTS_4625_350-05	Line Protection	1.0	1.0	1.5	0	
MTS_4625_350-06	Transformer Protection	1.0	1.0	0	0	
MTS_4625_350-07	Pilot Protection	1.0	1.0	0	0	
MTS_4625_350-09	Bus Protection	1.5	1.5	0	0	
MTS_4625_350-10	Generator Protection	2.5	2.5	2.0	0	
MTS_4625_350-11	Protection System Misoperation	1.5	1.5	1.0	0	
MTS_4625_350-12	Protection System Maintenance Programs	2.0	2.0	1.0	0	
MTS_4625_375-01	Real Power Balancing Control Performance	3.0	3.0	3.0	0	Y
MTS_4625_375-02	Disturbance Control Performance	2.0	2.0	1.0	0	
MTS_4625_375-03	Frequency Response and Bias	2.0	2.0	1.0	0	Y
MTS_4625_375-05	Automatic Generation Control	3.0	3.0	1.0	0	
MTS_4625_376-01	Bulk Power System Communication Basics	1.0	1.0	1.0	0	
MTS_4625_376-02	Bulk Power System Communications and Coordination	2.5	2.5	2.0	1.5	Y
MTS_4625_377-01	CIP Personnel Responsibilities	1.0	1.0	1.0	0	
MTS_4625_377-02	CIP Perimeters and Configurations	1.0	1.0	1.0	0	
MTS_4625_377-03	Controls and Management	1.0	1.0	1.0	0	
MTS_4625_377-04	CIP Related BES Recovery Plans	1.0	1.0	1.0	0	
MTS_4625_377-05	CIP Physical Security	1.0	1.0	1.0	0	
MTS_4625_378-01	Emergency Policies and Procedures	1.5	1.5	1.5	0	
MTS_4625_381-05	Reliability Coordination - Planning and Operations	1.5	1.5	0	0	
MTS_4625_381-06	Coordinating Entitles and Duties	1.5	1.5	0	0	
MTS_4625_387-01	Energy Production and Transfers	1.5	1.5	1.5	0	
MTS_4625_387-02	Transmission Operations	2.5	2.5	1.0	0	
MTS_4625_387-03	Economic Power System Operations	2.0	2.0	0	0	Y
MTS_4625_387-04	Power System Control Elements	1.5	1.5	0	0	Y
MTS_4625_387-05	Interconnected Energy Accounting	2.0	2.0	0	0	Y
MTS_4625_387-07	Supervisory Control and Data Acquisition (SCADA) Systems	2.0	2.0	0	0	
MTS_4625_387-10	Power System Restoration	2.0	2.0	2.0	0	
MTS_4625_388-01	Active and Reactive Power Fundamentals	2.0	2.0	2.0	0	Y
MTS_4625_388-02	Active and Reactive Power Limits and Flows	2.0	2.0	2.0	1	Y
MTS_4625_417-01	Switchgear	2.0	2.0	0	0	
MTS_4625_417-02	Low Voltage Breakers	1.0	1.0	0	0	
MTS_4625_417-03	Medium and High Voltage Switchgear	2.0	2.0	0	0	
MTS_4625_417-04	General Switchgear Maintenance	1.5	1.5	0	0	
MTS_4625_505-02	Steam Turbine Control and Operation	1.5	1.5	0	0	Y
MTS_4625_507-01	Generator and Auxiliary Systems' Functionality	1.0	1.0	1.0	0	Y
MTS_4625_507-03	Generator Construction and Process Control	1.0	1.0	1.0	0	
MTS_4625_560-01	Main Transformers	1.5	1.5	1.5	0	Y
MTS_4625_560-04	Protective Relays and Instrument Transformers	1.0	1.0	0	0	
MTS_4625_561-01	Preparing for Power Plant Start-ups	1.5	1.5	1.5	0	Y
	<b>Total CEHs</b>	<b>87.5</b>	<b>86.5</b>	<b>40.5</b>	<b>3.5</b>	