

Task to Training Matrix - PJM Online Training

Course Title (LMS Code)	CEH	Stand	Sim	EOP	Transmission Task Associations										Market Cert Hour
					Task 02	Task 07	Task 08	Task 10	Task 11	EOP-005 R8.2	EOP-005 R8.3	EOP-005 R8.4	EOP-005 R8.5		
OL Annual System Restoration Training (ONLEOPR13)	1	1	--	1	--	--	--	--	Yes	Yes	Yes	Yes	Yes	Yes	--
OL DOE Reporting Requirements (ONLMSCDE4)	1	1	--	1	--	--	--	--	--	--	--	--	--	--	--
OL Wind Generation Operating Considerations (ONLMSCWG4)	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2023 Winter Emergency Procedures Refresh (DRLEPF23P)	1	1	--	1	--	Yes	Yes	--	--	--	--	--	--	--	--
2024 Spring System Restoration Refresh (DRLSRD24P)	1	1	--	1	--	--	--	--	Yes	Yes	Yes	Yes	Yes	Yes	--
2024 Summer Emergency Procedures Refresh (DRLEPS24P)	1	1	--	1	--	Yes	Yes	--	--	--	--	--	--	--	--
2023 Fall System Restoration Refresh (DRLSRF23P)	1	1	--	1	--	--	--	--	Yes	Yes	Yes	Yes	Yes	Yes	--
OL NERC Standards (ONLNERC17)	8	8	--	8	--	--	--	--	--	--	--	--	--	--	--
OL Electrical Theory (ONLFUNET1)	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OL NUC-001 (JTOPS143)	1	1	--	1	--	--	--	--	--	--	--	--	--	--	--
Transmission ITP	OL Intro to PJM & Comm, Op Para 1 (T) (ONLTRN17A)	3	0.5	--	--	--	--	--	Yes	--	--	--	--	--	--
	OL Ops Parameters 2 & 3 (T) (ONLTRN17B)	1.5	0.5	--	1.5	--	--	--	--	--	--	--	--	--	--
	OL Ops Parameters 4 & 5 (T) (ONLTRN17C)	1	0.5	--	0.5	--	--	--	--	--	--	--	--	--	--
	OL Stability, BES & Outages (T) (ONLTRN17D)	2	--	--	--	Yes	--	--	--	--	--	--	--	--	--
	OL Emergency Procedures (T) (ONLTRN17E)	2.5	0.5	--	2.5	--	Yes	Yes	--	--	--	--	--	--	--
	OL System Restoration (T) (ONLTRN17F)	2.5	0.5	--	2.5	--	--	--	Yes	Yes	Yes	Yes	Yes	Yes	--
Generation ITP	OL Intro to PJM & Communications (G) (ONLGEN16A)	2	0.5	--	--	--	--	--	--	--	--	--	--	--	--
	OL PJM Markets & Real-Time Ops (G) (ONLGEN16B)	2	--	0.5	--	--	--	--	--	--	--	--	--	--	2
	OL Outage Scheduling (G) (ONLGEN16C)	1.5	0.5	--	--	--	--	--	--	--	--	--	--	--	--
	OL Emergency Procedures (G) (ONLGEN16D)	3	1	0.5	3	--	--	--	--	--	--	--	--	--	--
	OL System Restoration (G) (ONLGEN16E)	1.5	1	--	1.5	--	--	--	--	--	--	--	--	--	--
Governor Control and ACG (ONLMSCGC)	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HEMP/GMD (ONLMSCHMP)	1	0.5	--	1	--	--	--	--	--	--	--	--	--	--	--
Unit Dispatch-Normal & Off-SCED (JTOPS201)	1	--	--	1	--	--	--	--	--	--	--	--	--	--	1
Reserve Performance (JTOPS231)	1	--	--	1	--	--	--	--	--	--	--	--	--	--	1
Blackout Lessons Learned (PJMVTSO12)	2	--	--	2	--	--	--	--	Yes	--	--	--	--	--	--
IROL Simulation Exercises (PJMSIMOL1)	1	1	1	1	--	--	--	--	--	--	--	--	--	--	--
2024 Seminar - Online Training (SEM24S001)	5.5	2	--	2	--	Yes	--	--	Yes	Yes	Yes	--	Yes	--	--
2024 Seminar - Transmission Topics (SEM24S002)	2	0.5	--	0.5	Yes	--	--	Yes	--	--	--	--	--	--	--
2024 Seminar - Generation & Market Topics (SEM24S003)	4	--	--	--	--	--	--	--	--	--	--	--	--	--	3.5
2024 Seminar - Operations Update & Lessons Learned (SEM24S004)	2	1	--	2	--	--	--	--	--	--	--	--	--	--	--

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					Task 02	Task 07	Task 08	Task 10	Task 11	EOP-005 R8.2	EOP-005 R8.3	EOP-005 R8.4	EOP-005 R8.5		
Operating Concepts Self-Study* (PJMSIMOC2)	2	--	1.5	--	--	--	--	--	--	--	--	--	--	--	--
Voltage Control Self-Study* (PJMSIMVC2)	2	--	1.5	--	--	--	--	--	--	--	--	--	--	--	--
Synching Islands Self-Study* (PJMSIMSR2)	2	2	1.5	2	--	--	--	--	Yes	--	Yes	Yes	--	--	--
Dynamic Reserves Self-Study* (PJMSIMDR1)	2	2	1	2	--	--	--	--	Yes	--	--	--	--	--	--

*Available for self-study, pre-registration required

Task to Training Matrix - PJM Virtual Training

Course Title (LMS Code)	CEH	Stand	Sim	EOP	Transmission Task Associations										Market Cert Hour
					Task 02	Task 07	Task 08	Task 10	Task 11	EOP-005 R8.2	EOP-005 R8.3	EOP-005 R8.4	EOP-005 R8.5		
Locational Marginal Pricing (LMP) (PJMVTS01)	2	--	--	--	--	--	--	--	--	--	--	--	--	--	2
Generator Energy Schedules & Parameters (PJMVTS05)	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	1.5
ARR/FTR Basics (PJMVTS06)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.5
ARR/FTR Advanced (PJMVTS16)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.5
Regulation Market Overview (PJMVTS07)	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	1.5
Reserve Market Overview (PJMVTS08)	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	1.5
Day Ahead Market Simulation (PJMVTS14)	1.5	--	1.5	--	--	--	--	--	--	--	--	--	--	--	1.5
Real-Time Market Simulation (PJMVTS15)	1.5	--	1.5	--	--	--	--	--	--	--	--	--	--	--	1.5
Transmission Line Protection (PJMVTS01)	2	--	1.5	--	--	--	--	--	--	--	--	--	--	--	--
Voltage Control with Generators & LTCs (PJMVTS02)	2	--	1.5	--	--	--	--	--	--	--	--	--	--	--	--
Capacitors, Ferranti Rise & Surge Impedance Loading (PJMVTS03)	2	--	1.5	--	--	--	--	--	--	--	--	--	--	--	--
Synching Islands (PJMVTS04)	2	2	1.5	2	--	--	--	--	Yes	--	Yes	Yes	--	--	--
Dynamic Reserves (PJMVTS05)	2	2	1	2	--	--	--	--	Yes	--	--	--	--	--	--
Communications (PJMVTS07)	1.5	1.5	--	1.5	--	--	--	--	--	--	--	--	--	--	--
Stability (PJMVTS08)	2	2	--	2	--	--	--	--	--	--	--	--	--	--	--
Overview of Emergency Procedures (PJMVTS09)	1.5	1.5	--	1.5	--	Yes	Yes	--	--	--	--	--	--	--	--
Reporting Transmission Outages via eDART (PJMVTS10)	1.5	1.5	--	--	--	Yes	--	--	--	--	--	--	--	--	--
System Restoration (PJMVTS14)	4	3.5	4	4	--	--	--	--	Yes	Yes	Yes	Yes	--	--	--
Balancing and Frequency Control (PJMVTS15)	1	1	--	--	--	--	--	--	--	--	--	--	--	--	--
Governor Control and AGC (PJMVTS16)	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Three-Phase Power Basics (PJMVTS17)	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Transformer Theory Basics (PJMVTS18)	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Task to Training Matrix - PJM Instructor-Led Training

Course Title (LMS Code)	CEH	Stand	Sim	EOP	Transmission Task Associations										Market Cert Hour
					Task 02	Task 07	Task 08	Task 10	Task 11	EOP-005 R8.2	EOP-005 R8.3	EOP-005 R8.4	EOP-005 R8.5		
Transmission ITP	Intro to PJM & Comm, Op Para 1 (T) (PJMTRN17A)	5	0.5	1	--	--	--	--	Yes	--	--	--	--	--	--
	Ops Parameters 2 & 3 (T) (PJMTRN17B)	6	2.5	1.5	6	--	--	--	--	--	--	--	--	--	--
	Ops Parameters 4 & 5 (T) (PJMTRN17C)	7	3	4	2.5	--	--	--	--	--	--	--	--	--	--
	Stability, BES & Outages (T) (PJMTRN17D)	5	--	0.5	--	Yes	--	--	--	--	--	--	--	--	--
	Emergency Procedures (T) (PJMTRN17E)	5	2	--	5	--	Yes	Yes	--	--	--	--	--	--	--
	System Restoration (T) (PJMTRN17F)	6	2.5	--	6	--	--	--	--	Yes	Yes	Yes	Yes	Yes	--
	System Restoration Simulation (T) (PJMTRN17G)	4	3.5	4	4	--	--	--	--	Yes	Yes	Yes	Yes	--	--
Generation ITP	Intro to PJM & Communications (G) (PJMGEN16A)	5.5	0.5	1	--	--	--	--	--	--	--	--	--	--	2.5
	PJM Markets & Real-Time Ops (G) (PJMGEN16B)	8	--	3	--	--	--	--	--	--	--	--	--	--	3.5
	Outage Scheduling (G) (PJMGEN16C)	2.5	0.5	0.5	--	--	--	--	--	--	--	--	--	--	2.5
	Emergency Procedures (G) (PJMGEN16D)	5.5	4	--	5	--	--	--	--	--	--	--	--	--	1
	System Restoration (G) (PJMGEN16E)	3	2	--	3	--	--	--	--	--	--	--	--	--	--
	System Restoration Simulation (G) (PJMGEN16F)	1.5	1.5	1.5	1.5	--	--	--	--	--	--	--	--	--	--
Electrical Theory (PJMFUNET2)															
Power System Elements (PJMFUNPS2)															
Market Optimization Workshop (PJMMKTOPT)															
System Restoration Workshop (PJMSRW131)															
Day Ahead & Real-Time Market Simulation (PJMSIMDRT)															
Ops-X Simulations (PJMSIMOPX)															
Protective Relaying Simulations (PJMSIMPRS)															

Please note this is for planning purposes only and may be subject to change

DRAFT Training Calendar 2024

January

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

- 1/10 Communication
- 1/18 Transmission Line Protection
- 1/22-25 Transmission ITP - CTC
- 1/23 ARR/FTR Basics
- 1/24 ARR/FTR Advanced

February

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29		

- 2/13 Load Management Registrations

March

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

SEMINAR

- 3/5-8 Wk 1 - Pittsburgh, PA
- 3/12-15 Wk 2 - Pittsburgh, PA
- 3/12 DR Overview
- 3/19-22 Wk 3 - Pittsburgh, PA
- 3/25-26 Wk 4 - Session 1 - Virtual
- 3/27-28 Wk 4 - Session 2 - Virtual

April

Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

SEMINAR

- 4/1-2 Wk 5 - Session 1 - Virtual
- 4/3-4 Wk 5 - Session 2 - Virtual
- 4/9-12 Wk 6 - CTC - Audubon, PA
- 4/15 PJM 101 - CTC
- 4/16-19 Wk 7 - CTC - Audubon, PA
- 4/22-23 Wk 8 - Session 1 - Virtual
- 4/24-25 Wk 8 - Session 2 - Virtual
- 4/30-5/3 Wk 9 - CTC - Audubon, PA

May

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

- SEMINAR**
- 4/30-5/3 Wk 9 - CTC - Audubon, PA
- 5/7-10 Wk 10 - CTC - Audubon, PA
- 5/14 Economic DR in Energy Mkts

June

Su	Mo	Tu	We	Th	Fr	Sa
				1		
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

- 6/11 DR Economic Offers in MG
- 6/18 Stability
- 6/18 Load Mgmt Dispatch
- 6/24-27 Transmission ITP - CTC
- 6/25 Load Mgmt Settlements & Compliance
- 6/26-27 System Rest. Workshop - CTC

July

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

- 7/9 Market Settlements 101 - CTC
- 7/10-12 Market Sett. Advanced - CTC
- 7/16-18 Power System Elements - CTC
- 7/25 Governor Control and AGC

August

Su	Mo	Tu	We	Th	Fr	Sa
			1	2		
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

- 8/5-9 Generation ITP - CTC
- 8/15 Three-Phase Power Basics
- 8/20-22 Market Optimization Workshop - CTC
- 8/27 Transformer Theory Basics
- 8/27 PJM 101 - Richmond, VA
- 8/28 LMP/FTR - Richmond, VA

September

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

- 9/9 PJM 101 - CTC
- 9/11 Load Serving Entity - CTC
- 9/17-19 Power System Elements - CTC
- 9/30-10/3 Transmission ITP - CTC

October

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

- 9/30-10/3 Transmission ITP - CTC
- 10/8 Reporting Trn Outages via eDART
- 10/10 Dynamic Reserves
- 10/15 Demand Response Overview
- 10/29 Economic DR in Ancillary Services
- 10/30 Gen Energy Schedules & Param

November

Su	Mo	Tu	We	Th	Fr	Sa

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