



v. 10/10/2024

DCEP IT-Specialist Training (Pacific Time)

- 6:50 Registration (10 minutes)**
- 7:00 9. IT Specialist Training Introduction (20 minutes)**
Overview
Resources
- 7:20 10. IT as Basis for Data Centers (40 minutes)**
Data Center History
Compute and Storage Growth
Enterprise IT Architecture
- 8:00 11. Energy Terms and Metrics (30 minutes)**
Energy Math
Power and Density
Performance Metrics
- 8:30 12. IT Asset Performance (30 minutes)**
IT Asset Performance
Energy Efficiency and Business Priorities
Cost Implications of Poorly Utilized Assets
- 9:00 Break (30 minutes) Lunch for East Coast participants**
- 9:30 13. IT Energy Usage (50 minutes)**
IT Equipment Types and Anatomy
Energy Use Patterns of IT Equipment
Things that Impact IT Device Energy Use and Best Practices
- 10:20 14. Predicting and Measuring Energy Usage (50 minutes)**
Estimating Energy Usage
Tools and Techniques
Measuring/Modeling Energy Usage
- 11:10 Break (30 minutes) Lunch for West Coast participants**
- 11:40 15. Controlling IT Equipment Energy Usage; Remediation, Mitigation (80 minutes)**
Underutilization and Server Waste
IT Equipment Refresh
IT Power Management and Policies
- 1:00 17. DOE IT Equipment Energy Assessment Tool (60 minutes)**
IT Equipment Inventory
Energy Saving Measures
Results
- 2:00 Exam (30 minutes)**
- 2:30 End of IT Specialist Training/Exam**
- 16. Winning Approval and Executing IT Energy Efficiency Projects (Self Study)**
Energy Performance as an Indicator of Asset Performance
Benefits/Outcomes of Energy Improvement
Articulating Value

DCEP Electrical-Specialist Training (Pacific Time)

- 6:50 Registration (10 minutes)**
- 7:00 1. Electrical Specialist Training Introduction (20 minutes)**
Overview
Resources
- 7:20 2. Fundamentals (25 minutes)**
Nomenclature
Power Factor
UPS Ratings
- 7:45 Break (5 minutes)**
- 7:50 3. Power Train (65 minutes)**
Typical Electrical Equipment
Causes of Electrical Energy Inefficiency
Component Energy Efficiency
- 8:55 Break (30 minutes) Lunch for East Coast participants**
- 9:25 4. Power Metering (35 minutes)**
Attributes of Power Metering
Types of Meters
Onboard Server Sensors
- 10:00 5. UPS Equipment (60 minutes)**
Primary Functions of a UPS
Energy Storage Technologies
UPS Efficiency/Replacement
- 11:00 Break (5 minutes)**
- 11:05 6. Electrical Power Chain Tool (50 minutes)**
Overview
Application Example
Takeaways
- 11:55 Exam (30 minutes)**
- 12:25 End of Electrical Specialist Training/Exam**