Call 1-877-978-7246

TPC TRAINING

GENERATORS & EMERGENCY POWER

A 2-Day Course On Operating and Maintaining Onsite Power Generation Systems

Fundamentals of Emergency Power Generator Operations, Applications, and Troubleshooting

- Reserve your space now either online or by calling us at 1-877-978-7246!
- Check us out online at live.tpctraining.com for a complete list of all virtual and in-person seminars.
- This seminar is also available for Virtual or In-Person Private Group Training

"I have had many of your training classes...this was the best." — John T., Maintenance Technician

Learning Objectives:

- Installation, operation and maintenance of generators
- Specific requirements and recommendations
- Power backup systems suitable for your facility
- Emergency planning
- Reading and understanding vendor technical information
- How to conduct tests on your equipment
- When to schedule tests and maintenance activities
- Working with parallel energy sources
- Synchronizing procedures and load sharing

NO RISK REGISTRATION — MONEY BACK GUARANTEE

SEMINAR OVERVIEW

Available in both virtual and in-person, instructor-led formats, this two-day Generators & Emergency Power course is designed for anyone involved with power generation equipment in their plant or facility. Students will learn how to select, install, operate, and maintain generators, as well as how to isolate and repair generator problems. This course can help companies avoid the disastrous consequences of power failure and ensure that facilities continue running even when the electricity doesn't.

WHAT YOU WILL TAKE HOME

- A laminated, full-color TPC Training Reference Guide detailing all the "mustknow" information covered in the class. Keep this with you while on the job for immediate knowledge recall.
- Comprehensive classroom materials
- A Personalized Training Certificate with 0.8 TPC Training Continuing Education Units for each day attended, 1.6 for both days.
- All the information you need from asking our instructors specific questions about your own unique equipment or facility.

CONTINUING EDUCATION

Upon completion of this seminar, the student will receive a Certification of Completion and .8 TPC Training CEUs per day attended. Most employers and many government agencies accept TPC Training CEUs to fulfill their continuing education requirements. If the student needs CEUs to renew a state license, please contact us at 303-867-5039 to ensure the state licensing board has approved the seminar. If we are currently not approved by your state licensing board, we are happy to begin the process as long as we receive your request at least one month before the training date.

DISCUSSION TOPICS

Overview
- Why Generators are Needed
- Types of Outages
- Code Requirements
- Combined Heat and Power (CHP) and Cogeneration

Electrical Fundamentals
- Calculate Max Current
- AC vs. DC
- Real vs. Apparent Power

AC Generators (Alternators)
- Brushless
- Zigzag
- Exciter
- Voltage Regulator

Alternator Loading
- Transient Voltages
- Recovery Time
- Startup Current
- Generator Sizing
- UPS Systems

Generator Grounding
- Portable vs. Mobile Generators
- Bonding vs. Grounding
- Setting up a Grounding System

Protection and Transfer of Electric Power
- One-Line Diagrams
- Switchgear
- Circuit Breakers
- Transfer Switches
- Open vs. Closed Transition
- Load Banks
- Wet-Stacking

Generator Controls
- Governors
- Voltage Regulators
- PID Loops
- Load Sharing

Engine Protection
- System Control and Monitoring
- Engine Control Unit (ECU)
- Emergency Stop
- SCADA System

Troubleshooting and Maintaining Generator Electrical Components
- Maintaining Batteries
- Maintaining Automatic Transfer Switch
- Governor and Exciter Troubleshooting
- Checking DiodesElectrical Tests Using the Megohmmeter

Generators – Mechanical
- Prime Movers
- Types of Internal Combustion Engines
- Cooling System
- Lubrication System
- Overspeed System
- Fuel Storage Issues
- Sound Attenuation
- Developing a Generator Service Schedule

UPS Systems: Components, Problems, Maintenance
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- Components
- Problems
- Maintenance

The Future of Power Generation
- Renewable Energy

Fuel Cells

"The instructor clearly had an abundance of field expertise."
— Ben A., Technician

JOIN OUR CLASSROOM SEMINARS FROM VIRTUALLY ANYWHERE

Our virtual instructor-led training option allows students to connect to a live classroom seminar via a web link, with the ability to participate full in the classroom dialogue, exercises, and Q&A. Online participants get all the benefits of the full classroom experience, plus the convenience of remote access.

Features include
- Two full days of live, interactive instruction from a TPC Training instructor
- All classroom materials in PDF format
- Certificate of completion for 16 hours of live training
- Full technical support to ensure your online experience is a rewarding one

SEMINAR FEE & AGENDA

This 2-day course is just $1195 (Earn 1.6 CEUs)

7:30 am	Registration
8:00 am	Class Begins
12:00 -1:00 pm	Lunch (on your own)
4:30 pm	Class Ends

NO RISK REGISTRATION & MONEY-BACK GUARANTEE

You can reserve your space in the class at any time and cancel without penalty. Cancellations made more than 14 days prior to the seminar may be refunded or rescheduled. Cancellations made within 14 days may be rescheduled for any future topic and/or date. If you're not satisfied with the course, we'll promptly refund your payment.

BRING THE TRAINING TO YOUR FACILITY VIRTUALLY OR IN-PERSON

Every public seminar class in our Course Catalog can be conducted virtually or on-site at your facility, with the same expert instructors. To arrange an in-person private group training, call or email us at virtual@tpctraining.com.

Some Advantages of In-Person Private Group Training
- Cost Savings — Save time and travel costs by keeping workers on-site
- Customized Content — Tailor the seminar to your facility and equipment
- Flexibility — Accommodate multiple shifts and different start and end times

GN2021

Reserve your space now either online or by calling us at 1-877-978-7246!