

11TH ANNUAL DISTRIBUTED GENERATION SCHOOL

- 3-1/2 days of intense learning with updated topics
- Classroom lectures, product demonstrations, and hands-on sessions
- Tuition includes Basler software

Join your peers in the industry and learn about control and protection required in a variety of Distributed Generation applications. Register today. Space is limited.

10% Early Bird discount; sign up before February 20

Event Information

Dates:
March 26-29, 2012

Location:
Fairview Heights, IL
(Near St. Louis, MO)

**Comments from
2011 attendees:**

“Excellent! Well prepared, well presented and well organized.”

“Everything was professionally handled, overall experience was A+.”

“Fun and informative.”

Presented by

 **Basler Electric**
www.basler.com

Objectives

Participants will learn:

- ➔ What is Distributed Generation? Why is it unique?
- ➔ How to control a generator operating in parallel with a distribution network
- ➔ How to control the prime mover of a generator operating in parallel with a distribution network
- ➔ What causes loss of synchronism and what effect does it have on the synchronous generator?
- ➔ How to apply engine control systems intended for standby and portable equipment to Distributed Generation systems
- ➔ What IEEE Std 1547™-2003 does and does not say about intertie protection
- ➔ How to apply generator control to excitation for islanded or parallel operation
- ➔ Protective relay requirements for the DG system, focusing on generator, intertie, and transformer protection
- ➔ Proper protection and control techniques in wind, solar and small hydro applications

Topics

Introduction to Distributed Generation

- Requirements of the electric utility
- Designing the DG system
- Standards applicable to DG
- Evaluating results vs. model

Operation of Generators in Parallel with Large Networks

- Theory of operation
- Real power and reactive power
- Loss of generator synchronism
- Loss of excitation
- Loss of network interconnection

Synchronizing and Load Sharing for Network-Connected Generators

- Engine control and protection systems
- Synchronizing
- Load sharing for DG operation

Generator Control – Excitation

- Voltage regulator operation
- Parallel operation with a network
- Small excitation – brushless generators
- Medium excitation – brush-type or brushless rotary exciters

Protection of DG Systems

- Generator protection
- Intertie protection
- Transformer protection
- Review IEEE Std 1547-2003 on interconnection

Renewable Energy Overview

- PV inverter applications
- Small hydro control and protection
- Intertie protection for wind applications

Who should attend?

Individuals with a background in switchgear design, consulting, utility intertie, industrial power, and/or engine generator set application can benefit from the knowledge gained at this school.

Basler Product Solutions

By popular demand, we have expanded the product training. Each day, Basler Application Engineers and instructors will present information on the features and advantages of Basler products as they relate to DG applications discussed in each talk. Sessions include product overviews, review of settings and configurations, and implementation of distributed generation schemes using Basler products. Each student will receive free Basler's BESTCOMSPlus® software for applicable products.

Application Demos & Hands-On

With this year's expanded Demo sessions and available hands-on opportunities, there's more to the Basler Distributed Generation School than lectures. You'll see for yourself how to use what you've learned in the "classroom" in real-life applications by watching real-time demonstrations of some of the latest products and solutions.

Demonstrations scheduled include:

- Generator paralleled to network
- Engine/generator control, protection and synchronizing, plus PID tuning for load sharing
- Generator and intertie protection systems
- Genset controller and multifunction relay hands-on
- Basler Electric factory tour

Schedule

Monday, March 26, 2012

8:00 a.m. - Welcome and Introductions, Lectures,
Product Solutions
6:00 p.m.-8:00 p.m. - Ice Breaker Reception

Tuesday, March 27, 2012

8:00 a.m. - Lectures and Product Solutions
5:00 p.m. - Q&A

Wednesday, March 28, 2012

8:00 a.m. - Plant tour, product demos and hands-on
opportunities (see registration form)
5:30 p.m. - Return to hotel

Thursday, March 29, 2012

8:00 a.m. - Lectures and Product Solutions
11:30 a.m. - Course review

**Complimentary Lunch provided each day by
Basler Electric**

**Inquire about a tuition discount
for 3 or more students
registered from one company!**

Instructors

Basler Electric's in-house experts draw from more than 100 years of experience in the fields of electric power system control and protection. Their backgrounds include Product and System Design Engineering, Product Training, Technical Support, Sales, Field Service, and Application Engineering. Each instructor has individual expertise in Voltage Regulators, Excitation Systems, Genset Controllers, or Protective Relays, as it pertains to Distributed Generation applications. In this course, they share their experience and knowledge through lectures, examples and demonstrations. They will be available for one-on-one discussions.

Scheduled instructors include:

Terry Gaines

Technical Sales and Support Manager

Mike Basler

Electrical Engineering Manager

Matt Miersch

Product Specialist/Regulation and System Controls

Jerry Johnson

Application Engineering Supervisor

Dr. Kiyong Kim

Consulting Research and Development Engineer

Dr. Russell Glenn

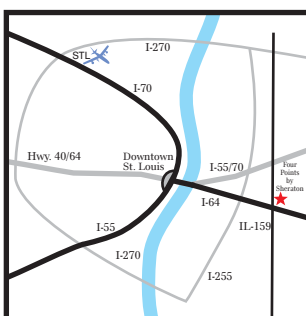
Principal Software Engineer

Logistics

Lodging/Expenses

A room block (at the group rate of \$89.00 plus tax, single or double occupancy) has been reserved for our students, and your reservation will be made by Basler Electric. We suggest that you check in on Sunday, March 25 and plan to depart late afternoon on Thursday, March 29. It is **not** necessary to contact the hotel. The tuition fee includes printed and electronic course material. Daily continental breakfast and lunch are provided, as well as Tuesday evening's icebreaker reception, which offers an opportunity to network with students and instructors. Travel, lodging, and evening meal expenses are not included.

Guests can enjoy free parking, indoor pool, hot tub, exercise room, and free wireless high speed Internet access.



Four Points by Sheraton
319 Fountains Parkway
Fairview Heights, IL 62208

Registration

Register on-line at www.basler.com or fax or mail your completed Registration Form(s). **Due to limited seating, enrollment is based on receipt of payment.** The tuition for the 3-1/2 day school is \$1,395.00, payable by check, MasterCard, VISA, or American Express. (Please make checks payable to Basler Electric.) *Be an "early bird" and get a 10% discount off the tuition fee if your credit card payment is made or your check is received by February 20!* Upon receipt of payment, an acknowledgment will be sent to you via email. All cancellations received on or before February 17, 2012, will be subject to a \$100 processing fee. Cancellations received after this date will create a credit of the tuition, less processing fee, good toward any other Basler Electric conference or school for one year.


Transportation


The Four Points by Sheraton is approximately 26 miles (approx. 35 minutes) from St. Louis' Lambert International Airport and 10 minutes from downtown St. Louis. It is located just off Interstate 64 (Exit 12) and IL Route 159, close to The Gateway Arch, a shopping mall and restaurants.


Registration Form - Distributed Generation School

March 26-March 29, 2012 - \$1,395.00

Three ways to register:

 Fax your completed form to
(618) 654-2351, Carol Ingram, (CMC Dept.)

 Call (618) 654-2351 extension 122
with your information

 E-mail your completed form
to info@basler.com

Registrant

Name and Title: _____

Name to appear on attendance badge: _____

Company: _____

Mailing Address: _____

City: _____ State: _____ Country: _____ Zip/Postal Code: _____

Daytime Phone: (_____) _____ Fax: (_____) _____

E-mail address: _____

Hotel Room

Basler Electric will make your reservation. You are responsible for payment.

Arrival Date: _____
(Sunday, March 25 suggested)

Departure Date: _____
(Late afternoon of Thursday, March 29 suggested)

Single Double

If double, will you be sharing with another student? Yes No

If yes, name: _____

Hands-On

**Please choose one Hands-on Session
to attend during the plant tour**

DGC-2020 Digital
Genset Controller

OR

BE1-11 Multifunction
Relay System

Payment

Credit Card:

VISA MasterCard American Express

Card Number: _____

Credit card security code _____ (3 or 4 digits)

Name on Card: _____

Expiration Date: _____

Cardholder's billing address, if different from above:

Check:

Please make check for \$1,395.00
payable to Basler Electric Company.

Mail to:

Basler Electric
Attn: Accounting Dept.,
12570 State Route 143
Highland, IL 62249

Sign up early and pay just \$1255!
Register and complete
payment to Basler Electric by
credit card or check on or before
Monday, February 20!

-- Please review cancellation policy, Registration Section, page 3. --



ISO 9001-2008/2000
Highland, IL USA Wasselonne, France
Taylor, TX USA Suzhou, China



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