

Annual Southwest Electrical Metering School October 17-21, 2005 Course 4 - Diversified Electrical Metering Technology

Instructions for scheduling your customized agenda.

1. **Everyone** needs to attend:

Monday, October 17 Registration at 10:30 a.m. (Riverside Campus, The Hanger)
General Opening Session at 1:00 p.m.

Friday, October 21 Closing events (beginning at 8:00 a.m. and ending at 12:00 p.m.)

2. On the attached **Course Scheduling Sheet**, check the box for the seminar(s) you wish to attend. Please make sure that you pay careful attention to the times the seminars are scheduled and the times for visiting the Manufacturer's Exhibits. **Note:** Some of the seminars are continued after breaks and lunch, or split between two days, you will need to check both boxes to continue in the second and third part of that seminar.

You must select the number of seminars needed to complete the entire day.

Please do not leave an empty time frame.

If you do leave an empty space we will fill in a seminar to fill that time.

3. Please notice that all four sessions are exactly the same for everyone on Friday, October 21. You do not need to select any of the sessions for that day, they will be automatically assigned.

Friday, October 21, 2005

8:00 a.m.	Course Exam, Moderator	10:45 a.m.	Safety Roundtable
9:00 a.m.	Exam Overview <i>Instructional Team</i>		<i>Instructional Team</i>
9:30 a.m.	Handling Customers with Care	11:30 a.m.	General Session Certificates, Awards <i>John Morton, Flowers Const.</i>
	12:00 a.m.	Adjourn	

4. After you have completed your course schedule, fax to the Customer Care Center at 979-458-1426.

Instruction Sheet

Course 4 Scheduling Sheet

Name _____

Company _____

Address _____

City/State/Zip _____

Phone _____

Fax _____

Email _____

Course 1**Introduction to Electrical Metering****Monday, October 17, 2005**

- 1:30 p.m. **Electric Power Systems and Metering**, *Victor Love*, LCRA
- 3:00 p.m. Break
- 3:15 p.m. **Electric Power Systems and Metering (con't)**

Tuesday, October 18, 2005

- 8:00 a.m. **Energy Power Concepts**
Alan Gilley, CenterPoint
- 9:30 a.m. Break
- 9:45 a.m. **Power Triangle and Vector Concepts**, *John Niesner*, Itron
- 11:45 a.m. Lunch
- 12:30 p.m. **Basic Transformer Theory**
Jack Lemmon, TEEEX
- 2:00 a.m. **Visit Manufacturer's Exhibits**
- 2:30 p.m. **Basic Transformer Theory**

Wednesday, October 19, 2005

- 8:00 a.m. **Load Characteristics and Lab**
Alan Gilley, CenterPoint Energy
- 9:45 a.m. **Visit Manufacturer's Exhibits**
- 10:15 a.m. **Meter Theory**
Billy Williams, Hughes Supply
- 11:45 a.m. Lunch
- 12:30 p.m. **Meter Theory (con't)**
- 2:30 p.m. Break
- 2:45 p.m. **Meter Component Analysis**
Larry Williams, Landis + Gyr

Thursday, October 20, 2005

- 8:00 a.m. **Basics of Meter Safety and Arcing Demo**
Eric Celestine, TNMP and TEEEX
- 9:45 a.m. Break
- 10:00 a.m. **Meter Forms and Applications**
David Floyd, Priester Supply
- 11:30 a.m. Lunch
- 12:45 p.m. **Meter Testing Concepts**
Floyd Blackwell, UTEC
- 3:00 p.m. Break
- 3:15 p.m. **Introduction to AMR System**
Ted Mitchell, Landis & Gyr
- 4:30 p.m. **Questionnaire and Evaluations**

Course 2**Advanced Electrical Metering****Monday, October 17, 2005**

- 1:30 p.m. **Review of Electrical Power Concepts**
Instructional Team
- 3:00 p.m. **Distribution Transformer Theory and Metering Application**
Jack Lemmon, TEEEX
- 3:30 p.m. Break
- 3:45 p.m. **Distribution Transformer Theory and Metering Application (con't)**

Tuesday, October 18, 2005

- 8:00 a.m. **Distribution Transformer Lab (con't)**
Jack Lemmon, TEEEX
- 10:00 a.m. Break
- 10:15 a.m. **4W, 3P Delta Theory and Metering Applications (problem solving)**
Alan Gilley, CenterPoint Energy
- 12:00 p.m. Lunch
- 12:45 p.m. **Visit Manufacturer's Exhibits**
- 1:15 p.m. **4W, 3P Delta Theory and Metering Applications (con't)**
- 3:15 p.m. Break
- 3:30 p.m. **4W, 3P Delta Theory and Metering Applications (con't)**

Wednesday, October 19, 2005

- 8:00 a.m. **Visit Manufacturer's Exhibits**
- 8:30 p.m. **4W, 3P Wye Theory and Metering Applications (problem solving)**
J. C. Mitchell, Landis + Gyr
- 9:45 a.m. Break
- 10:00 a.m. **4W, 3P Wye Theory and Metering Applications (con't)**
- 12:00 p.m. Lunch
- 12:45 p.m. **4W, 3P Wye Theory and Metering Applications (con't)**
- 2:30 p.m. Break
- 2:45 p.m. **Instrument Transformer Theory, Testing and Applications**
Nick Powers, Kulman

Thursday, October 20, 2005

- 8:00 a.m. **Instrument Transformer Theory, Testing and Metering Applications**
Nick Powers, Kulman
- 10:00 a.m. Break
- 10:15 a.m. **3W, 1P & 3P Theory and Metering Instruction**, TBA
- 11:30 p.m. Lunch
- 12:45 p.m. **3W, 1P & 3P Theory and Metering (con't)**
- 2:45 p.m. Break
- 3:00 p.m. **3W, 1P & 3P Theory and Metering (con't)**
- 4:30 p.m. **Questionnaire and Evaluation**

Course 3**Complex Electrical Metering Technology****Monday, October 17, 2005**

- 1:30 p.m. **SCADA Principles**
Bob Hughes, SEL
- 3:00 p.m. Break
- 3:15 p.m. **In-Service Testing of Instrument Transformers**, *Bert Akermann*, Spinlab Utilities

Tuesday, October 18, 2005

- 8:00 a.m. **Complex Metering**
Eric Venable, Itron
- 10:00 a.m. Break
- 10:15 a.m. **Transformer Loss Compensation**
Mike Bearden, Landis + Gyr
- 1:30 p.m. Lunch
- 12:15 p.m. **Transformer Loss Compensation (con't)**
- 2:30 p.m. **Visit Manufacturer's Exhibits**
- 3:00 p.m. **Transformer Loss Compensation (con't)**
- 4:00 p.m. **KYZ Metering**
Russ Grenier, GE

Wednesday, October 19, 2005

- 8:00 a.m. **Power Quality Measurements**
Ray Sanchez, AVO
- 9:30 a.m. **Visit Manufacturer's Exhibits**
- 10:00 a.m. **Power Quality Measurements (con't)**
- 11:30 a.m. Lunch
- 12:15 p.m. **High End Meter Applications**
Austin Energy/TMD/Landis + Gyr
- 2:15 p.m. Break
- 2:30 p.m. **High End Meter Applications (con't)**
- 3:45 p.m. **Field Testing of Solid State Meters and Devices**, *Chuck Weimer*, WECO

Thursday, October 20, 2005

- 8:00 a.m. **Integrated Communications**
Cecil Shaffer, Elster
- 9:30 a.m. Break
- 10:00 a.m. **Integrated Communications (con't)**
- 11:30 a.m. Lunch
- 12:45 p.m. **Fiber Optics and Instrument Transformers**, *Aftab Khan*, ABB
- 3:15 p.m. Break
- 3:30 p.m. **Radio Communications**
Walter Koopman, Georgetown Utilities
- 4:30 p.m. **Questionnaire and Evaluations**