

<b>Course 1</b> <b>Introduction to Electrical Metering</b> Moderator --- Walter Koopmann, SWEMA Vice President	<b>Course 2</b> <b>Advanced Electrical Metering</b> Moderator --- Beto Carranza, SWEMA President	<b>Course 3</b> <b>Complex Electrical Metering Technology</b> Moderator --- Kyle Tunnell, Past SWEMA President	<b>Course 4</b> <b>National Generation/Transmission Metering-(NG&amp;T)</b> Moderator --- Lynn Bailey, Past SWEMA President
<p>Monday, October 29, 2007</p> <p>10:30 am Registration (Hangar Area)</p> <p>1:00 pm General Opening Session Beto Carranza, SWEMA President</p> <p>1:30 pm <b>Electric Power Systems &amp; Basic Meter Math</b> Lynn Bailey, AEP</p> <p>3:00 pm Break</p> <p>3:15 pm <b>Electric Power Systems &amp; Basic Meter Math (cont.)</b> Lynn Bailey, AEP</p> <p>5:00 pm Session Ends</p>	<p>Monday, October 29, 2007</p> <p>10:30 am Registration (Hangar)</p> <p>1:00 pm General Opening Session Beto Carranza, SWEMA President</p> <p>1:30 pm <b>Review of Electrical Power Concepts</b> Instructional Team (John Niesner, Alan Gilley, Mike Cleveland)</p> <p>3:00 pm <b>Distribution Transformer Theory and Metering Application</b> Jack Lemmon, TEEEX (lab)</p> <p>3:30 pm Break</p> <p>3:45 pm <b>Distribution Transformer Theory and Metering Application, (cont)</b> Jack Lemmon, TEEEX (lab)</p> <p>5:00 pm Session Ends</p>	<p>Monday, October 29, 2007</p> <p>10:30 am Registration (Hangar)</p> <p>1:00 pm General Opening Session Beto Carranza, SWEMA President</p> <p>1:30 pm <b>SCADA Principles</b> Dick Martin, SEL</p> <p>3:00 pm Break</p> <p>3:15 pm <b>In-Service Testing of Instrument Transformers</b> Bert Akermann, Spinlab Utilities</p> <p>5:00 pm Session Ends</p>	<p>Monday, October 29, 2007</p> <p>10:30 am Registration (Hangar)</p> <p>1:00 pm General Opening Session Beto Carranza, SWEMA President</p> <p>1:30 pm <b>Understanding Reactive Meter Measurement</b> Mike Bearden, Landis+Gyr</p> <p>3:30 pm <b>Break</b></p> <p>3:45 pm <b>Effects of Power Quality on Metering</b> Bill Hardy, Powermetrix</p> <p>5:00 pm Session Ends</p>
<p>Tuesday, October 30, 2007</p> <p>8:00 am <b>Energy/Power Concepts</b> Alan Gilley, CenterPoint Energy</p> <p>9:30 am Break</p> <p>9:45 am <b>Load Characteristics and Lab</b> Alan Gilley, CenterPoint Energy</p> <p>11:45 am Lunch</p> <p>12:30 pm <b>Visit Manufacturers Exhibits</b></p> <p>1:15 pm <b>Power Triangle and Vector Concepts</b> John Niesner, Itron</p> <p>2:45 pm Break</p> <p>3:00 pm <b>Basic Transformer Theory</b> Jack Lemmon, TEEEX</p> <p>5:00 pm Session Ends</p>	<p>Tuesday, October 30, 2007</p> <p>8:00 am <b>Distribution Transformer Lab</b> Jack Lemmon, TEEEX</p> <p>10:00am Break</p> <p>10:15 am <b>4W, 3P Wye Theory and Metering Applications (problem solving)</b> J.C. Mitchell, Landis+Gyr (classroom)</p> <p>12 noon Lunch</p> <p>12:45pm <b>4W, 3P Wye Theory and Metering Applications (problem solving), cont</b> J.C. Mitchell, Landis+Gyr (tailboard session in classroom &amp; labs)</p> <p>2:45pm <b>Visit Manufacturers Exhibits</b></p> <p>3:30 pm <b>4W, 3P Wye Theory and Metering Applications (problem solving), cont</b> J.C. Mitchell, Landis+Gyr (labs &amp; classroom question and answer session)</p> <p>5:00 pm Session Ends</p>	<p>Tuesday, October 30, 2007</p> <p>8:00 am <b>Reference Standards Traceability</b> Dan Prijjevic, Radian</p> <p>10:00 am Break</p> <p>10:15 am <b>Transformer Loss Compensation</b> Mike Bearden, Landis+ Gyr</p> <p>11:30 am Lunch</p> <p>12:15 pm <b>Transformer Loss Compensation (cont)</b></p> <p>2:00 pm <b>Visit Manufacturers Exhibits</b></p> <p>2:45 pm <b>Transformer Loss Compensation (cont)</b></p> <p>4:00 pm <b>KYZ Metering</b> Russ Grenier, GE</p> <p>5:00 pm Session Ends</p>	<p>Tuesday, October 30, 2007</p> <p>8:00 am <b>Field Testing Facilities and Solid-State Meters and Devices</b> Steve Wright, Itron</p> <p>10:00 am Break</p> <p>10:15 am <b>Types of Communications in a Transmission Substation</b> Greg Bray, Ametek</p> <p>11:45 am Lunch</p> <p>12:30 pm <b>Advanced Communications (DNP, MODBUS, TCP_IP, etc)</b> Greg Bray, Ametek</p> <p>2:00 pm Break</p> <p>2:15 pm <b>Advanced Communications (DNP, MODBUS, TCP_IP, etc) (cont.)</b></p> <p>4:00 pm <b>Visit Manufacturers Exhibits</b></p> <p>5:00 pm Session Ends</p>
<p>Wednesday, October 31, 2007</p> <p>8:00 am <b>Basic Transformer Theory (cont)</b> Jack Lemmon, TEEEX</p> <p>9:45 am <b>Visit Manufacturers Exhibits</b></p> <p>10:15 am <b>Meter Theory</b> Billy Williams, Hughes Supply</p> <p>11:45 am Lunch</p> <p>12:30 pm <b>Meter Theory, cont</b> Billy Williams, Hughes Supply</p> <p>2:30 am Break</p> <p>2:45 pm <b>Meter Component Analysis</b> Calvin Bargsley, Landis+Gyr</p> <p>5:00 pm Session Ends</p>	<p>Wednesday, October 31, 2007</p> <p>8:00 am <b>Visit Manufacturers Exhibits</b></p> <p>8:30 am <b>4W, 3P Delta Theory and Metering Applications (problem solving)</b> Alan Gilley, CenterPoint Energy</p> <p>9:45 am Break</p> <p>10:00 am <b>4W, 3P Delta Theory and Metering Applications (problem solving) cont</b> Alan Gilley, CenterPoint Energy</p> <p>12 noon Lunch</p> <p>12:45 pm <b>4W, 3P Delta Theory and Metering Applications (problem solving) cont</b> Alan Gilley, CenterPoint Energy</p> <p>2:30 pm Break</p> <p>2:45 pm <b>Instrument Transformer Theory, Testing and Metering Applications</b> Nick Powers, Kuhlman</p> <p>5:00 pm Session Ends</p>	<p>Wednesday, October 31, 2007</p> <p>8:00 am <b>States Reactions to the US Energy Bill Impacts</b> David Stephenson, XCEL Energy</p> <p>9:30 am <b>Visit Manufacturers Exhibits</b></p> <p>10:00 am <b>What You Didn't Know About Var Metering</b> Russ Grenier, GE</p> <p>11:30 am Lunch</p> <p>12:15 pm <b>The Ins and Outs of VAR Flows</b> Mike Cleveland, TMD</p> <p>2:15 pm Break</p> <p>2:30 pm <b>Billing vs. Metering Accuracy</b> Bill Hardy, Powermetrix</p> <p>3:45 pm <b>Field Testing of Solid State Meters and Devices</b> Chuck Weimer, WECO</p> <p>5:00 pm Session Ends</p>	<p>Wednesday, October 31, 2007</p> <p>8:00 am <b>Instrument Transformers</b> Nick Powers, Kuhlman</p> <p>10:00 am <b>Visit Manufacturers Exhibits</b></p> <p>10:45 am <b>Instrument Transformers (cont)</b></p> <p>11:30 pm Lunch</p> <p>12:30 pm <b>Gross &amp; Net Generation Metering</b> Ken Swift, Oncor Electric Delivery</p> <p>2:15 pm Break</p> <p>2:30 pm <b>Advanced Transformer and Line Loss Compensation Theory</b> Daniel Cumming, Schneider Electric</p> <p>5:00 pm Session Ends</p>
<p>Thursday, November 1, 2007</p> <p>8:00 am <b>Basics of Meter Safety &amp; Arcing Demo</b> Eric Celestine, TNMP &amp; TEEEX</p> <p>9:45 am Break</p> <p>10:00 am <b>Meter Forms and Applications</b> David Floyd, Stuart C. Irby</p> <p>11:30 am Lunch</p> <p>12:45 pm <b>Meter Testing Concepts</b> Martin Hiatt, Powermetrix</p> <p>3:00 pm Break</p> <p>3:15 pm <b>Status of AMR/AMI</b> Ted Mitchell, Landis+Gyr</p> <p>4:30 pm Course Questionnaire and Evaluations Moderator / Instructional Team</p> <p>5:00 pm Session Ends</p>	<p>Thursday, November 1, 2007</p> <p>8:00 am <b>Instrument Transformer Theory, Testing and Metering Applications</b> Nick Powers, Kulman</p> <p>10:00 am Break</p> <p>10:15 am <b>3W, 1P &amp; 3P Theory and Metering</b> Ed Robbins-Xcel Energy (classroom)</p> <p>11:45am Lunch</p> <p>12:45pm <b>3W, 1P &amp; 3P Theory and Metering (cont.)</b> Ed Robbins, Xcel Energy (tailboard session in classroom &amp; labs)</p> <p>3:00pm Break</p> <p>3:15 pm <b>3W, 1P &amp; 3P Theory and Metering (cont.)</b> Ed Robbins, Xcel Energy (labs &amp; classroom question and answer session)</p> <p>4:30 pm Course Questionnaire and Evaluations Moderator / Instructional Team</p> <p>5:00 pm Session Ends</p>	<p>Thursday, November 1, 2007</p> <p>8:00 am <b>Integrated Communications</b> Ed Beronet, Elster</p> <p>9:30 am Break</p> <p>9:45 am <b>Integrated Communications (cont)</b> Ed Beronet, Elster</p> <p>11:45 am Lunch</p> <p>12:45pm <b>ANSI Standards</b> Bill Hardy, Powermetrix</p> <p>3:15 pm Break</p> <p>3:30 pm <b>Troubleshooting AMR Devices</b> Robert Pillsbury, Xcel Energy</p> <p>4:30 pm Course Questionnaire and Evaluations Moderator / Instructional Team</p> <p>5:00 pm Session Ends</p>	<p>Thursday, November 1, 2007</p> <p>8:00 am <b>Understanding One &amp; Three Line Metering Schematics</b> Tony Davis, ERCOT</p> <p>8:45 am Break</p> <p>9:00 am <b>Advanced SCADA Principles &amp; SCADA Technology</b> Bob Hughes, SEL</p> <p>11:30 am Lunch</p> <p>12:30 pm <b>Discussion of Deregulated Markets</b> <b>TBD</b></p> <p>1:30 pm Break</p> <p>1:45 pm <b>Engineering Design for Ring Buss and Breaker and a Half Meter Schemes</b> Glen Patton, BTU</p> <p>3:00 pm Break</p> <p>3:15 pm <b>Metering Verification for Ring Buss and Breaker and a Half Meter Schemes</b> Mike Cleveland, TMD</p> <p>4:30 pm <b>Course Questionnaire and Evaluations</b> Moderator / Instructional Team</p> <p>5:00 pm Session Ends</p>
<p>Friday, November 2, 2007</p> <p>8:00 am Course Exam - Moderator</p> <p>9:00 am Exam Overview - Moderator / Instructional Team</p> <p>9:30 am <b>Handling Customers with Care</b> John Morton, Flowers Construction/Texas Electric</p> <p>10:45 am Safety Roundtable</p> <p>11:30 am General Session-Awards, Certificates</p> <p>12 noon Dismissed</p>	<p>Friday, November 2, 2007</p> <p>8:00 am Course Exam - Moderator</p> <p>9:00 am Exam Overview - Moderator / Instructional Team</p> <p>9:30 am <b>Handling Customers with Care</b> John Morton, Flowers Construction/Texas Electric</p> <p>10:45 am Safety Roundtable</p> <p>11:30 am General Session-Awards, Certificates</p> <p>12 noon Dismissed</p>	<p>Friday, November 2, 2007</p> <p>8:00 am Course Exam - Moderator</p> <p>9:00 am Exam Overview - Moderator / Instructional Team</p> <p>9:30 am <b>Handling Customers with Care</b> John Morton, Flowers Construction/Texas Electric</p> <p>10:45 am Safety Roundtable</p> <p>11:30 am General Session-Awards, Certificates</p> <p>12 noon Dismissed</p>	<p>Friday, November 2, 2007</p> <p>8:00 am Course Exam - Moderator</p> <p>9:00 am Exam Overview - Moderator / Instructional Team</p> <p>9:30 am <b>Safety for High Voltage Substations &amp; Control Rooms</b> Freddie Whitlock, Center Point Energy</p> <p>10:45 am Safety Roundtable</p> <p>11:30 am General Session-Awards, Certificates</p> <p>12 noon Dismissed</p>