

TESCO-The Eastern Specialty Company



Metering

Traditional and Cutting Edge



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The Eastern Specialty Company

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Metering – Since 1904

- We participate actively in our industry
 - One of the co-authors of the latest Electric Meterman’s Handbook
 - As well as many others going all the way back to the very first one in 1910
 - We attend, support, present and teach at 36 meter schools annually
 - NC Meter School
 - Mid-South Meter School
 - Southeastern Meter School and Conference
 - SWEMA
 - Heartland Meterman’s School
 - Oklahoma Association of Electrical Cooperatives Annual AMI Meeting
 - Upper Mid-West Metering Association
 - Rocky Mountain Meter School
 - NWPPA E&O Conference every other year in Anchorage
 - ANSI C12.1 – Electric Metering
 - Voting Member
 - Participate and chair several working committees
 - Chosen as one of three liaisons to Measurement Canada
 - Selected as OIML representative and chair of C12.46
 - Participate in UL 375C co-working meetings
 - NIST/ANSI Handbook 44 and 130 for Electric Vehicles
 - ANSI Area Lighting



Customers – Electric Utilities

- Our customers are you – Electric Utilities in North America
- There are 3,374 Electric Utilities in North America today
 - Service 15,500,000 customers
 - Just over 40% have implemented AMI
 - TESCO customers service over 120,000,000 customers
 - We are not where we want to be yet – need 15,500,000
- There are ten utilities in this room servicing 293,801 customers
 - Six of you are customers
 - We are not where we want to be yet
- We have Regional Managers covering all of North America
 - They all live in their Region
- All of our manufacturing is done in North America
 - Headquartered in an old Mill in Bristol PA
 - MADE IN the USA
- Largest R&D team of any company in our niche
 - Constantly looking, learning and trying to understand what our industry needs next and what you need now



Metering – Traditional and Cutting Edge

- Traditional
 - Seals, test switches, pre-wired sockets
 - Field Test Equipment
 - Shop Equipment
 - Lab Equipment
 - Operations Software
 - Big Data Analysis
 - Meter Operations improvement – best practices
 - Meter shop services
 - Training Boards



Field Testing



- Accuracy Testing
- Meter Communications Performance
- Software & Firmware Verification
- Setting Verification
- Functional Testing
- Disconnect/Reconnect Functionality and as left setting
- Tamper Verification
- Site Audits appropriate to the type of meter

Metering – Traditional and Cutting Edge

- AMI

- Meter Qualification Boards
- Meter Farms
- Operations and Enterprise Solutions Software Interfaces
- AMI Solutions, Engineering support
 - First Article Testing – procedures and performance
 - Business case assistance
 - Operational preparation
- Safety Issues and concerns
- Shop and lab equipment
- Infrastructure planning, preparation and execution
 - For deployment and operations in a post-deployment world



Meter Qualification Boards



Meter Qualification Boards



Meter Qualification Boards



AMI Services – Cross Dock/Warehousing/Functional Testing/Sample Testing



AMI Services – Extended Antennas, RMA Processing



Slide 11



TESCO Meter Manager Software Modules- Meter Life Cycle

New Meter Purchase

- Purchase Order
- Vendor File
- Meter Receiving
- Acceptance Testing
- Device Creation in customer system of record e.g. CIS
- Device Release to Stock

Used Meter Processing

- Meter Check-in
- Meter Testing
- Device Restocking

Asset Management

- Track Inventory within shops / warehouses / storerooms, down to the container and/or shelf
- Track Inventory to the person or truck
- Meters are assigned to the person / truck
- As meters are set, they are removed from inventory
- Used meters are tracked from removal to meter shop
- Physical inventory counts may be performed at any time

Quality management

- Detailed analysis of meter performance
- In-service random sample and periodic test plans
- Full RMA tracking



Metering – Traditional and Cutting Edge

- Innovations

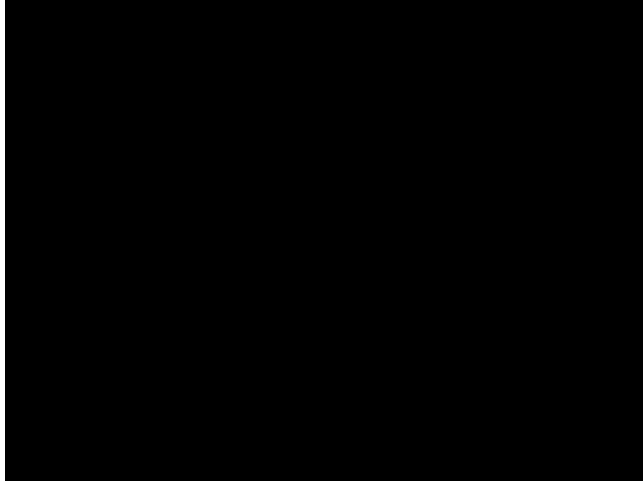
- New technology being licensed and incorporated into the meters you purchasing or will be purchasing
- New products that did not exist before we introduced them
 - Desk top Meter stations
 - Meter Farms
 - Hot Socket Gap Indicators
 - MQB's
- New Products for Metering Operations
 - Lighter, faster field test equipment
 - New lab and shop equipment for evaluation and ongoing engineering
 - Operations and Enterprise Solutions Software Interfaces



2100 TWACS



Hot Socket Simulator



[Click box to view video](#)



Hot Socket Gap Indicator / Socket Safety Clips



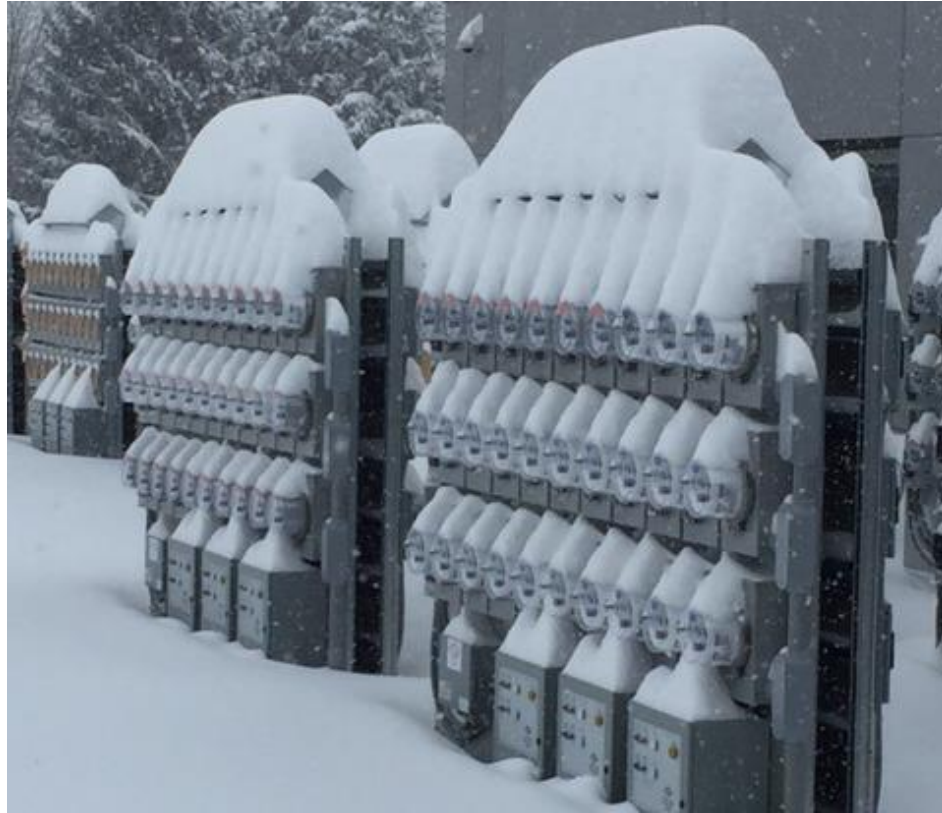
Meter Farms



Meter Farms

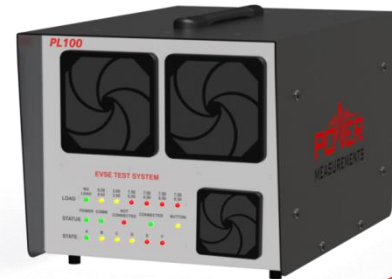


Meter Farms



Metering – Traditional and Cutting Edge

- Innovations in Emerging areas
 - Electric Vehicles
 - Developed first tester/calibration device with phantom load for this emerging industry
 - Working on new high speed DC units while allowing for upgrade path for early adopters
 - Area Lighting
 - Working with Utilities, manufacturers and ANSI
 - Developed multi-position test bed
 - Tested most of the available manufacturer supplied embedded metering offerings



Meterng

- Your Resource for anything Metering – new or old
- If we do our job well today and in the future you will start to think of TESCO for any metering need, issue or problem you need help with.
- Shamelss plug to start this;
 - Vote for us and think of us when Colin and friends asks you to vote for **Vendor to Watch** – Emerging Technologies



Questions and Discussion



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