# Your Premier Full-Service Calibration Provider for Power and Energy Measurement



#### **About RADIAN**

Radian Research, Inc. is a recognized world leader in the design, development, and manufacturing of high accuracy energy reference standards. RADIAN maintains a premier, full-service calibration laboratory that can meet all your certification, calibration, and testing needs.

Our calibration laboratory is directly traceable to the National Institute of Standards and Technology (NIST), the National Research Council (NRC) in Canada and Physikalisch-Technische Bundesanstalt (PTB) in Germany for AC electric energy. This traceability provides an efficient, economical alternative to a National Metrology Institute (NMI) for all your recertification requirements.

100% Employee Owned



Power and Energy Measurement Solutions

#### **Our Services**

RADIAN offers five distinct tiers of calibration services, each designed to meet your operational needs while maintaining superior accuracy and traceability. These services are designed to ensure that your energy measurement equipment, reference standards, and other metering devices perform optimally and are traceable to national laboratories.

# Tier 1 Energy Reference Standard Rental

RADIAN provides rental services for high-accuracy energy reference standards, offering both single-phase and three-phase equipment.

- **Accuracy Options:** 0.02% or 0.01% accuracy levels are available to meet various precision needs.
- **Benefits:** This tier is a cost-effective, short-term solution for utilities or companies that need reliable calibration without a long-term commitment.
- Ideal For: NIST-traceable calibration (ex: during system upgrades or temporary increases in testing demands).

# Tier 2 Onsite Calibration Services (Flexible Schedule)

RADIAN's qualified specialists come directly to your facility, offering the convenience of onsite calibration without requiring you to ship your equipment. This service provides flexible scheduling coordinated with other customers in your area.

- Calibration Range: 20 200 test points per piece of equipment per energy metric (Watthour default\*), with results displayed to 2 decimal places.
- **Benefits:** Minimizes equipment downtime and reduces logistical costs, along with comprehensive NIST-traceable calibration reports. Ideal for maintaining calibration with minimal disruption.
- Additional Services: Preventative maintenance, engineering enhancements, firmware updates, and repairs available upon request.
- Time Estimate: Approximately 1 hour per piece of equipment.

# Tier 3 Onsite Calibration Services (Dedicated Schedule)

This dedicated onsite service ensures that your equipment receives comprehensive calibration with greater precision.

- Calibration Range: 200 500 test points per piece of equipment per energy metric (Watthour default\*), with results displayed to 3 decimal places for higher resolution eliminating accuracy rounding.
- **Benefits:** Tailored to fit your schedule with increased resolution of test results. This tier provides more in-depth calibration services than Tier 2, along with comprehensive NIST-traceable calibration reports.
- Additional Services: Preventative maintenance, engineering enhancements, firmware updates, and repairs available upon request.
- Scheduling: Dedicated and customized to meet our customer's operational needs, ensuring minimal disruption.

At RADIAN's state-of-the-art laboratory in Lafayette, Indiana, calibration services are performed using the most accurate, precise and stable reference standards available.

- **Calibration Range:** 250 9,600 test points per piece of equipment covering a broad range of: voltages, currents, and other parameters.
- Additional Services: Preventative maintenance, engineering enhancements, firmware updates, repairs, and full factory calibration reporting.
- Benefits: RADIAN's in-house calibration ensures the highest level of accuracy, precision and stability, along with comprehensive NIST-traceable calibration reports.

# Tier 5 Accredited Calibration Services

This is RADIAN's highest calibration tier, encompassing all Tier 4 services with additional ISO/IEC 17025 accreditation, recognized internationally.

- **Accreditation:** Calibrations are carried out within the accredited scope, ensuring compliance with global standards.
- **Calibration Range:** 250 9,600 test points per equipment, with the highest degree of accuracy, precision and stability.
- Additional Services: Preventative maintenance, firmware updates, and more, just like Tier 4, with the added assurance of accredited testing.
- **Benefits:** The most rigorous level of calibration available, along with comprehensive NIST-traceable calibration reports, ideal for organizations requiring accredited documentation for regulatory compliance or international trade.

# **RADIAN Laboratory Credentials**

- ISO/IEC 17025, A2LA Accredited
- ANSI/NCSL Z540-1-1994 (MIL-STD-45662A plus software control)
- Directly Traceable to the National Institute of Standards and Technology (NIST) in the United States and the National Research Council (NRC) in Canada for AC Energy
- NIST and NRC Traceable for Frequency, DC Volts, Resistance, Phase, AC Volts, AC Amps, Watthours, VARhours, and VAhours
- PTB Traceable for Three-phase Watthours
- ISO 9001 Certified Quality Management System

\*Additional test points and energy metrics (i.e. VARhours and VAhours) and/or metrics (i.e. frequency, AC Volts, and AC Amps) available for quoting upon request.



#### Why RADIAN's Lab?

RADIAN's laboratory is known for its accuracy, precision and stability, making it the preferred choice for energy measurement calibration.

- **Trusted Technology:** All AC Energy measurements are based on world-renowned technology, respected by electric utilities, meter manufacturers, and National Metrology Institutes.
- Exclusive Service: RADIAN is the only certified laboratory equipped to service RADIAN, WECO, and UTEC products. This exclusive certification ensures unmatched expertise and specialized care in handling these trusted brands.
- **Experienced Staff:** Our team is comprised of experienced and knowledgeable professionals who are highly skilled in performing accurate calibrations and testing.
- Fast Turnaround: RADIAN offers fast and efficient service, ensuring minimal downtime for your equipment.
- Cost-Effective Solutions: RADIAN provides top-tier services at competitive rates, offering significant value to customers.
- Convenience: RADIAN comes to your facility for service. Convenient payment options like: PO, ACH, and credit cards.

### Certify, Calibrate, Upgrade, and Repair

RADIAN provides comprehensive services to ensure that your equipment is operating at peak performance, whether it's through certification, calibration, upgrades, or repairs.

- Certify ANY AC Energy Standard Ensure that it meets operational and compliance requirements.
- Test and Certify Accuracy of AC Equipment: RADIAN can test and certify the accuracy of AC Voltmeters, AC Ammeters, AC Wattmeters, and Phase Angle Meters.
- Harmonics and Revenue Meter Analysis: Specialized testing is available for Harmonics Waveform Analyzers and revenue meter analysis.
- Remote Accuracy Certification: RADIAN offers remote certification services for added convenience.
- Training and Support: RADIAN provides both application and maintenance training to help your team get the most out of your equipment.
- Specialized Testing: Tailored testing solutions are available for unique customer requirements.
- Multi-Year Certification Packages: Long-term certification packages are available for continued reliability and compliance over time.

## Why Choose RADIAN's Calibration Services?

RADIAN's full spectrum of calibration services are backed by extensive credentials, including ISO/IEC 17025 accreditation and ISO 9001 certifications. By utilizing RADIAN, customers gain access to highly accurate, precise, stable, and traceable calibration services, minimizing uncertainty and ensuring compliance with industry standards. Whether you need short-term rentals, onsite services, or comprehensive lab-based calibrations and services, RADIAN is equipped to provide tailored solutions for your power and energy measurement needs.

For further inquiries or to schedule a service, contact Radian Research at radian@radianresearch.com or (765) 449-5575.

