

CITY OF NORTH LITTLE ROCK, ARKANSAS
COMMERCE DEPARTMENT
Mary Beth Bowman, Director
Amy Smith, Assistant Director for Procurement
Crystal Willis, Assistant Purchasing Agent/Admin Sect.



120 Main Street, North Little Rock, AR 72114
P.O. Box 5757 North Little Rock, AR 72119
501-975-8881 Phone
501-975-8885 Fax

INVITATION TO BID

Bid Number: 17-3435 Date Issued: February 8, 2017

Date & Time Bid Opening: Thursday, February 23, 2017 @ 10:30 am

RW-30 WECO Portable Three Phase Meter Site Source Analyzer with Part #AW0010XX Ampflex Current Profile and Part #AW0005XX Optocom Optic or Equivalent

Bid Price at Each: \$ _____

One (1) Day of Training at Home Office: \$ _____

Manufacturer (If bidding an alternative): \$ _____

Specifications attached.

For technical questions and/or comments, contact Jeff Eisenhower at 501-992-4039.

Bidding an Alternative Product

When bidding an alternative product vendor's bid submittal package must include the following:

1. Notification as to the cost difference between the substituted product and the listed product;
2. A detailed analysis of the difference between the listed product and the proposed product;
3. Product Identification, manufacturer literature.

Unless otherwise stated, the use of a manufacturer's name and product number are for descriptive purposes and establishing general quality levels only. They are not intended to be restrictive. Bidders are required to state exactly what they intend to furnish, otherwise, it is fully understood that they shall furnish all items stated.

If you are obtaining this bid from our website, please be reminded that addendums may occur. It is therefore advisable that you review our listings for attachments including any changes to the bid.

The City of North Little Rock encourages participation of small, minority, and woman own business enterprises in the procurement of goods, services, professional services, and construction, either as a general contractor or sub-contractor. It is further requested that whenever possible, majority contractors who require sub-contractors, seek qualified small, minority, and woman businesses to partner with them.

EXECUTION OF BID

Upon signing this page, the organization certifies that they have read and agree to the requirements set forth in this bid including conditions set forth and pertinent information requests.

Name of Firm: _____ Phone No.: _____

Tax Identification No.: _____

Business Address: _____

Signature of Authorized Person: _____

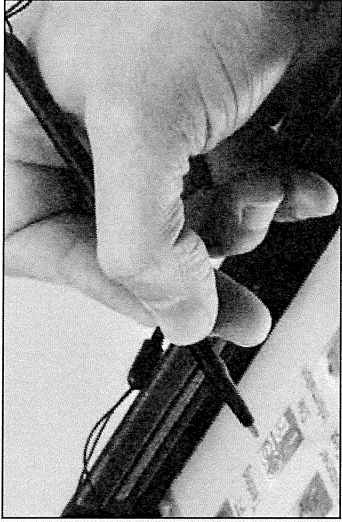
Title: _____ Date: _____

UNSIGNED BID COVER SHEET WILL BE REJECTED.

RW-30

Three-Phase Field Testing

Portable Three-Phase Meter Site Source Analyzer



*Radian Research Reference Standard
Accuracy - Proven*

R A D I A N
W E C O
Power and Energy Measurement Solutions

Portable Three-Phase Meter Site Source Analyzer RW-30

WECO's next generation Meter Site Source Analyzer delivers three-phase field-testing utilizing the Radian Research RD-3X series reference standard integrated within the unit. The RW-3X allows you to execute a multitude of tests at the customer's site which includes testing with sources to ANSI requirements. Testing the meter with the customer's load, performing CT burden and ratio tests, and verifying system wiring gives you the peace of mind that the entire metering installation is correct. The RW-3X series also provides for Harmonic Analysis, CT Testing, Vectors, and Trends Testing all without ever pulling the meter from its socket.



Using the RW-3X is a familiar process due to the Microsoft™ Windows® 7, 64-bit operating system embedded within the unit. Large internal storage allows for numerous test results, as well as custom site configuration and test sequences to be saved locally on the RW-3X. The convenient touch screen interface allows instant access to the Winboard Embedded application without the need for an external keyboard, mouse, or monitor. These, however, can be easily connected to the RW-3X, providing you with additional options. You can also control the RW-3X from your iPhone or iPad by using WECO's Winboard Embedded Remote App — available for free in the iTunes App Store. A durable screen protector supplies an extra safeguard for the 8.4" LCD touch screen while shielding against glare for better visibility.



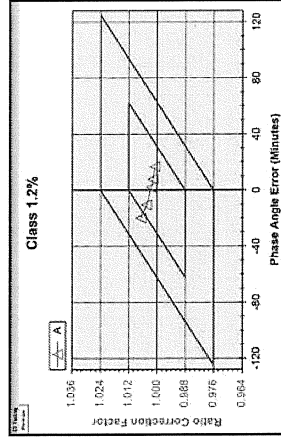
The RW-3X's feature-rich software, designed with user-friendly screens, lead you through installation, wiring checks, testing, and record keeping. Unlimited test profiles, sequences and site configurations may be created and saved. Test results are fully compatible with WECO's industry specific WATT-Net™ software, providing centralized record keeping with data editing and report generation. Data can be exported as Microsoft™ Excel, user-defined, or PDF files.

The RW-3X can perform a complete site analysis which includes Power Quality, Meter Testing, and Transformer Testing. Power Quality performs a Wiring Check to verify correct service wiring. If improper wiring is detected,



the operator is prompted to correct the wiring before testing will start. A Vector diagram gives a visual representation of the phase relationships. Primary and Secondary metrics and waveforms along with Harmonic content are displayed in real-time. Analyze Harmonics through the 60th order providing total harmonic distortion with the amplitude and phase of each Harmonic. Meter Testing allows for either sourced voltage and current or the customer's load for verifying meter accuracy. Transformer Testing provides burden and ratio accuracy measurement for both current and potential transformers along with demag for Current Transformers.

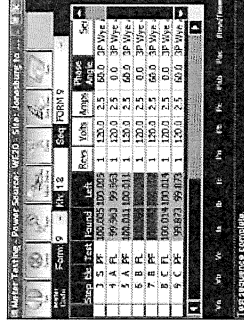
The RW-3X comes with fuseless voltage and current sources that self-protect against short-circuit, thermal, and over-current fault conditions. These internal sources provide six drive channels allowing independent waveforms for voltage and current on all three phases. Harmonic waveforms can be recorded in the field or manually created to be played back by the RW-3X. Recorded Harmonic waveforms can also be played back on the Model 4000 series testboards. Whether sinusoidal or distorted, both types of waveforms are solely under the user's control, and the test parameters can be repeated in the field or back at the shop. Using the RW-3X, the meter can be completely tested and analyzed for a wide range of repeatable test conditions.



The RW-30 ships with a powerful Radian Research three-phase reference standard, the RD-30, which boasts a 0.04% accuracy margin of error. If your utility demands higher levels of accuracy, then you may choose the RW-31 complete with a Radian Research RD-31 supplying 0.02% accuracy. These NIST traceable reference standards ensure a true meter accuracy test is being performed. Accuracy verification of the reference standard can automatically be performed using the RW-3X Standards Compare Routine allowing easy comparison to an external master standard.

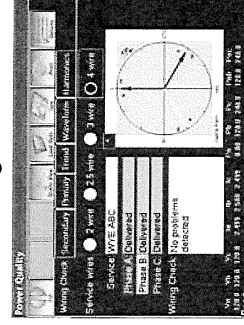
The RW-3X packs a lot of features into a small package:

Meter Testing



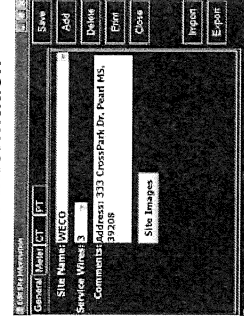
Meter Testing with the RW-3X allows you to really put a meter through its paces. Test any combination of elements, phases and test types with the selection of a predefined test sequence. Results are clearly displayed in an easy to read table. The user is alerted to tests that fall outside of a specified accuracy range by results that are clearly labeled in red.

Wiring Check



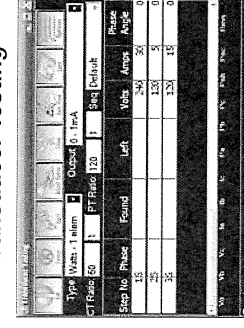
Wiring Check allows you to verify the service at a site and get valuable information about the service type, voltages, currents and phase angles. Wiring Check will also alert you to potential problems with the service.

Site Information



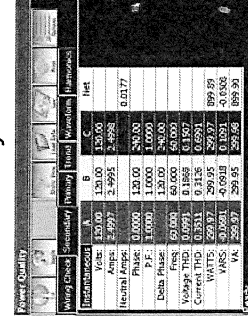
Site Information allows you to set up and recall specific information on the devices at a test site such as meters, current transformers and potential transformers. This method of data management keeps you from having to enter information while out in the field. If data is changed in the field the RW-3X updates the site information database so it's saved for the next time you test the site.

Transducer Testing

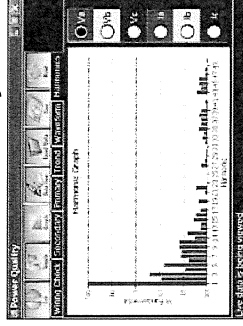


The RW-3X is capable of testing transducers with outputs between +/-20mA.

Secondary Check

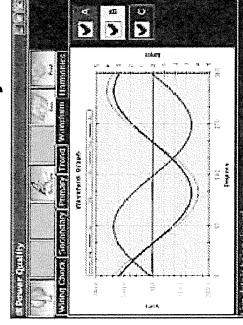


Harmonic Analysis



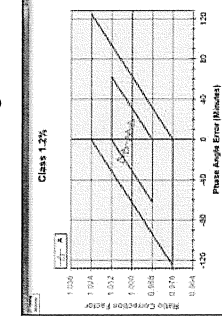
The system's powerful Harmonic Analysis feature displays harmonic data (both RMS and percent of fundamental) for all three phases up to the 60th harmonic as a bar graph or raw numbers.

Waveform Analysis



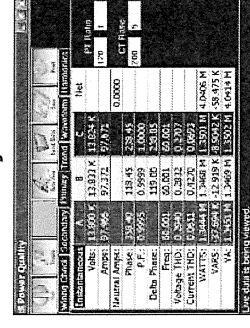
Waveform analysis gives you the ability to view voltage and current waveform graphs for all three phases. You can view a real time waveform graph for any combination of phases. The interactive graph allows you to zoom in and out as well as retrieve exact numerical measurements by clicking on any point.

CT Testing



Transformer Testing allows for the selection of any combination of ratio measurement and burden testing up to a maximum of 4.0 Ohms. Selected tests automatically run through in a single pass. Numerical results are given which are also plotted on a parallelogram. A separate "Demag" process can be run to demagnetize the transformer under test.

Primary Check



Retrieve data on the calculated electrical quantities for transformer secondaries and primaries of the meter installation with the RW-3X's Secondary and Primary Checks. Everything from Volts to VARS is measured, in real time, across all three phases for each check. Results are clearly displayed in a color-coded table and can be changed from real time to a snapshot with the click of the stylus.

**TERMS AND STANDARD CONDITIONS
CITY OF NORTH LITTLE ROCK, ARKANSAS**

PLEASE READ CAREFULLY

1. When submitting an "Invitation to Bid," the bidder warrants that the commodities covered by the bid shall be free from defects in material and workmanship under normal use and service. In addition, bidder must deliver new commodities of the latest design and model, unless otherwise specified in the "Invitation to Bid."
2. Prices quoted are to be net process, and when an error is made in extending total prices, the City may accept the bid for the lesser amount whether reflected by extension or by the correct multiple of the unit price.
3. Discounts offered will be taken when the City qualifies for such. The beginning date for computing discounts will be the date of invoice or the date of delivery and acceptance, whichever is later.
4. When bidding other than the brand and/or model specified in the "Invitation to Bid," the brand and/or model number must be stated by that item in the "Invitation to Bid," and descriptive literature be submitted with the bid.
5. The City reserves the right to reject any and all bids.
6. The Purchasing office reserves the right to award items, all or none, or by line item(s).
7. Quality, time and probability of performance may be factors in making an award.
8. Bid quotes submitted will remain firm for 30 calendar days from bid opening date; however, the prices may remain firm for a longer period of time if mutually agreeable between bidder and the Department of Commerce and Governmental Relations.
9. Bidder must submit a completed signed copy of the front page of the "Invitation to Bid" and must submit any other information required in the "Invitation to Bid."
10. In the event a contract is entered into pursuant to the "Invitation to Bid," the bidder shall not discriminate against any qualified employee or qualified applicant for employment because of race, sex, color, creed, national origin or ancestry. The bidder must include in any and all subcontracts a provision similar to the above.
11. Sales or use tax is not to be included in the bid price, but is to be added by the vendor to the invoice billing to the City. Although use tax is not to be included in this bid, vendors are to register and pay tax direct to the Arkansas State Revenue Department.
12. Prices quoted shall be "Free on Board" (F.O.B.) to destination at designated facility in North Little Rock. Charges may not be added after the bid is opened.
13. In the event of two or more identical low bids, the contract may be awarded arbitrarily or for any reason to any of such bidders or split in any proportion between them at the discretion of the Department of Commerce and Governmental Relations.
14. Specifications furnished with this Invitation are intended to establish a desired quality or performance level, or other minimum dimensions and capacities, which will provide the best product available at the lowest possible price. Other than designated brands and/or models approved as equal to designated products shall receive an equal consideration.
15. Samples of items when required, must be furnished free, and, if not called for within 30 days from date of bid opening, will become property of the City.
16. Bids will not be considered if they are: 1. Submitted after the bid's opening time. 2. Submitted electronically or faxed (unless authorized by Purchasing Agent).
17. Guarantees and warranties should be submitted with the bid, as they may be a consideration in making an award.
18. **CONSTRUCTION**
Contractor is to supply the City with evidence of having and maintaining proper and complete insurance, specifically Workman's Compensation Insurance in accordance with the laws of the State of Arkansas, Public Liability and Property Damage. All premiums and cost shall be paid by the Contractor. In no way will the City be responsible in case of accident.
- B. When noted, a Certified check or bid bond in the amount of 5% of total bid shall accompany bid.
- C. A Performance Bond equaling the total amount of any bid exceeding \$10,000.00 must be provided for any contract for the repair, alteration or erection of any public building, public structure or public improvement (pursuant to Act 351 or 1953 as amended by Act 539 of 1979).
19. **LIQUIDATED DAMAGES** - Liquidated damages shall be assessed beginning on the first day following the maximum delivery or completion time entered on this bid form and/or provided for by the plans and specifications.
20. **AMBIGUITY IN BID** - Any ambiguity in any bid as the result of omission, error, lack of clarity or non-compliance by the bidder with specifications, instructions, and all conditions of bidding shall be construed in the light most favorable to the City.
21. The bid number should be stated on the face of the sealed bid envelope. If it is not, the envelope will have to be opened to identify.
22. Whenever a bid is sought seeking a source of supply for a specified period of time for materials and services, the quantities of usage shown are estimated ONLY. No guarantee or warranty is given or implied by the participants as to the total amount that may or may not be purchased from any resulting contracts. These quantities are for the bidders information ONLY and will be used for tabulation and presentation of bid and the participant reserves the right to increase or decrease quantities as required.
23. The City of North Little Rock reserves the right to reject any and all bids, to accept in whole or in part, to waive any informalities in bids received, to accept bids on materials or equipment with variations from specifications in those cases where efficiency of operation will not be impaired, and unless otherwise specified by the bidder, to accept any item in the bid. If unit prices and extensions thereof do not coincide, the City of North Little Rock may accept the bid for the lesser amount whether reflected by the extension or by the correct multiple of the unit price.
24. Additional information or bid forms may be obtained from:
COMMERCE DEPARTMENT, 120 Main Street, P.O. Box 5757, North Little Rock, Arkansas 72119 (501) 975-8881 www.nlr.ar.gov

Bidding documents must be submitted on or before the bid's opening date and time. Unless noted, sealed bids must be submitted to the Commerce Department at 120 Main Street, North Little Rock, AR 72114 or PO Box 5757, North Little Rock, AR 72119

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