

# MET-EQ-RES-T.DOC

## RESIDENTIAL METER

### COL STOCK# 17-01-009

**SELF CONTAINED SOLID-STATE WATT-HOUR ELECTRIC METER, ONE PHASE, 3 WIRES.**

Revision	Date	By	Description
0	10/3/2007	sbill	Creation

- 1. SCOPE..... 1-2**
- 2. EVALUATION OF THE BIDS ..... 2-3**
  - 2.1. TECHNICAL ..... 2-3
  - 2.2. RELIABILITY DATA ..... 2-3
  - 2.3. WARRANTY ..... 2-4
  - 2.4. PRICE ..... 2-4
  - 2.5. DELIVERY LEAD TIME ..... 2-4
- 3. TECHNICAL SPECIFICATIONS ..... 3-5**
  - 3.1. METER DEFINITION ..... 3-5
  - 3.2. SPECIFIC REQUIREMENTS ..... 3-5
  - 3.3. COL METER NUMBER PRINTED ON THE METER ..... 3-5
- 4. CONTRACT TERMS ..... 4-6**
  - 4.1. COL STANDARD TERMS ..... 4-6
  - 4.2. RIGHT TO REJECT ..... 4-6
  - 4.3. SHIPMENT PARTICULAR TERMS ..... 4-6

## 1. SCOPE

This specification is to define the terms of a yearly contract agreement for the supply of **self contained solid-state Watt-hour electric meter, one phase, 3 wires**. This annual contract has an option to renew for two (2) one (1) year periods upon mutual consent.

The yearly estimated quantity is 3,000 meters (varies with growth +/- 15%)

The Owner commits to place orders to only the selected manufacturer for that type of meter in exchange for a price based on the estimated quantity.

However there is no firm commitment from the Owner to purchase any meter until a Purchase order is issued.

In return, the Bidder commits to sell at the offered price and within the offered delivery lead time for one year starting from the bid opening date.

## 2. EVALUATION OF THE BIDS

All bids will be evaluated based on the following criteria.

Technical	20%	Each technical exception will be graded from 1 to 5. The bidder with the highest total grade will score 0. Any bidder without exception will score 100. The grade in between will be linearly prorated.
Reliability data	10%	Based on the Guaranteed MTBF: The highest reported reliability expressed in Mean Time Before Failure will score 100 The lowest will score 0. The grade in between will be linearly prorated.
Price	50%	The lowest price will score 100 The score of 0 will correspond to 120% of the lowest price.
Delivery lead Time	20%	Emergency lead time for 192 meters maximum will represent 80 points out of the total 100 points. Each of the lead times (emergency and regular) will be calculated linearly using these reference points: Emergency: 1 week =80 points, 4 weeks = 0 points Regular: 4 weeks = 20 points, 8 weeks = 0 points

### **2.1. TECHNICAL**

The only contractual terms receivable will be the City of Lakeland terms along with the exception list. Each exception shall refer to the bid document name, page number and paragraph number. An exception list may be faxed to 863-834-6777 referencing the Request for Quotation number. Some exceptions may be disqualifying if their nature changes the function of the meter or drastically reduced its usage or if it modifies largely the contract terms.

### **2.2. RELIABILITY DATA**

If no data is provided the score will be 0.

To validate the guaranteed failure rate we ask you to provide the reported reliability expressed in Mean Time Before Failure.

To be considered the data shall be provided with a list of significant customers (customers that own a statistically significant number of the offered meter) willing to verify the information provided with the contact information (Company Name, Name, function title, Email and Phone number).

After the first year the MTBF will be calculated and compared to the rated guaranteed MTBF by the manufacturer in the bid documents:

Based on the installed duration an expected number of failures will be calculated.

A penalty of \$100.00 per failure over the expected rate will be applied as a credit as the last purchase under the contract agreement based on the contract firm price (even though the one year will expire).

### **2.3.WARRANTY**

The warranty shall be 1 year from the install date or two years from the delivery date which ever comes first, and shall cover all shipment cost (including the return of the failed meters).

### **2.4.PRICE**

The price shall be FOB to the Owner's facility (city of Lakeland warehouse).

The price is firm for the duration of 1 year.

### **2.5.DELIVERY LEAD TIME**

The city of Lakeland has an automated reordering process based on consumption. However during sudden high growth periods it is possible but unlikely that an emergency delivery be required. The emergency lead time is the maximum guaranteed lead time for a maximum quantity of 192 meters.

During the contract, non respect of the lead time will be subject to a dollar credit of 5 dollars per day per meter. The delivery lead time is calculated from the purchase order received date to the owner meter received date in business days.

### 3. TECHNICAL SPECIFICATIONS

#### 3.1. METER DEFINITION

- Form.....2S
- Phase.....1
- Wires.....3
- Volts.....240
- Class.....200
- ANSI C12.20 Accuracy class .....0.2
- Number of displayed digits.....5
- Cover.....Polycarbonate or Glass
- Test Amps.....30
- Register Multiplier.....Kr=1
- Base.....Socket

The meter shall meet all applicable ANSI C12 standards.

In particular:

- ANSI C12.19 Utility Industry End Device Data Tables - Tables that standardize how meters are read and programmed.
- ANSI C12.20 (1998): American National Standard for Electricity meters 0.2 and 0.5 Accuracy Classes

#### 3.2. SPECIFIC REQUIREMENTS

A way to reset the KWH to all zeros shall be furnished.

Individual calibration data shall be provided a CD

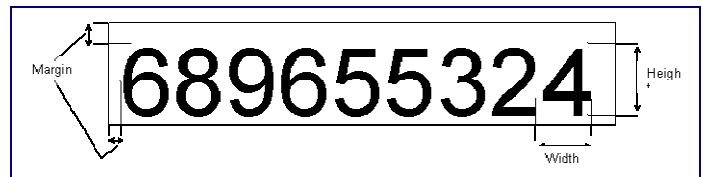
Company number and name shall be on the nameplate furnished by the manufacturer.

#### 3.3. COL METER NUMBER PRINTED ON THE METER

The Chief meter technician shall be contacted to obtain the list of meter numbers to be used on each purchase.

The Meter Number tag shall be white character over black background or black character over white background.

The Font shall be Arial or equivalent to be approved by the Lakeland electric Meter Shop. The character height shall be at least 0.35 inch and the width 0.2 inch. The characters spacing shall be at least 0.05 inch.



The tag background margin shall be at least 0.15 inch in either direction.

The printing method shall be of a grade weather proof for 20 years without noticeable degradation in its legibility under the condition of Florida, regarding weather, temperature and UV exposure.

## **4. CONTRACT TERMS**

### **4.1. COL STANDARD TERMS**

All city of Lakeland standard purchasing Terms apply. In the event that this document (MET-EQ-RES-T) would contradict the standard terms, MET-EQ-RES-T shall prevail.

### **4.2. RIGHT TO REJECT**

Municipal Electric System may sample test each shipment to ensure accurate performance and compliance with the latest version of ANSI Standard C12.1 and may reject shipment based on these results. Any meter out of calibration will be covered under the warranty conditions and accounted in the failure rate calculation.

### **4.3. SHIPMENT PARTICULAR TERMS**

Meters shall be fully assembled with cover and secured with the inner security seal into a box with spacers and pads to prevent damage during routine handling and indoor storage. Boxes will be marked with utility meter numbers of meters enclosed, stacked and banded to pallets of 24 boxes (96 meters) per pallet. Meters will be delivered in quantities specified by the contract.