

City of Farmington  
Advanced Metering Infrastructure (AMI) Stock Order  
Bid #26-165392R

- I. **Purpose:** The City of Farmington is requesting bids for specialty meters to complete the Advanced Metering Infrastructure (AMI) project and for reserve stock.
- II. **Submittal Instructions:** Bids must only be submitted using the City's online bidding system, [IonWave](#). Mailed, emailed, or faxed bids will not be accepted and will be returned unopened. Bidder must provide all requested information by completing the online submittal process and attaching requested documentation at <https://fmtn-ebidding.ionwave.net>.
- III. **General Conditions:**
- A. Laws and Regulations
1. This procurement is governed by New Mexico State Statutes 1978, Chapter 13, Public Purchases and Property. The City also requires that all responses to this bid, and any contracts that may arise as a result of this procurement, be in accordance with laws, ordinances, and regulations of the State of New Mexico and the City of Farmington. City of Farmington's General Terms and Conditions. Reference <http://www.farmingtonnm.gov/documentcenter/view/5096>
- B. The City reserves the right to reject any or all bids or to waive technicalities at its option when in the best interests of the City.
- C. Bidders may submit more than one bid that meet or exceed the specifications listed. Bidder must create a second vendor file in Ionwave in order to submit a second bid.
- D. In responding to this solicitation, the Bidder represents that it will not practice unlawful discrimination per Section 28-1-7 NMSA 1978 and Title VI of the Civil Rights Act of 1964 - 49 CFR part 21, with regard to, but not limited to, the following: race, religion, color, national origin, ancestry, sex, sexual orientation, gender identity, spousal affiliation, physical or mental handicap, age or serious medical condition.
- E. The Bidder hereby proposes to furnish the items or services bid on, F.O.B. Destination, Farmington NM, at the unit prices quoted herein after notice of bid award, upon the issuance of a purchase order.
- F. Bidder must use the Bid Line Items provided in the online bidding system and complete all information in the blanks provided. Failure to comply, or use of Bidder provided forms, may be considered non-responsive at the City's option.

Bids submitted with the City's online bidding system may be retracted prior to the time set for opening Bids. The bid may not be retracted after the bid has been unsealed, and the Bidder, in submitting the same, warrants and guarantees that their bid has been carefully reviewed and checked and that it is in all things true and accurate and free of mistakes and that such bid will not be withdrawn unless evidence of a mistake and non-responsiveness is submitted to the Chief Procurement Officer for review and consideration (reference 13-1-106NMSA).

- G. If items for which bids have been called for have been identified as a "Brand Name or Equal" description, such identification is intended to be descriptive, but not restrictive, and is to indicate the quality and characteristics of products that will be satisfactory. Bids offering "equal" products will be considered for award if such products are clearly identified in the bids and are determined by the City to be equal in all material respects to the brand name products referenced. Unless the Bidder clearly indicates in their bid that they are offering an "equal" product, their bid must be considered as offering a brand name product.

Equal must be taken in its general sense and must not mean identical. Specifications are for the sole purpose of establishing minimum requirements of level of quality, standards of performance and design and is in no way intended to prohibit the bidding of any manufacturer(s) item of equal material. The City of Farmington must be the sole judge of equality in their best interest and decisions of the City of Farmington as to equality must be final.

- H. Pursuant to Section 13-1-108 NMSA 1978, the total amount of the bid must exclude the applicable state gross receipts tax or applicable local option tax. The City will pay for any taxes due on the contract and will pay any increase in applicable taxes which become effective after the date the contract is entered into in addition to the bid total based upon separate billings which the successful Bidder must submit with each request for payment. Taxes must be shown as a separate amount on such billing or request for payment and must separately identify each tax being billed.

To assist the City with budget preparation, the Bidder must complete the Estimate of Taxes attribute of this bid and must identify by name each tax Bidder believes to be applicable to this bid and must estimate the amount of each tax which will be charged on the entire bid.

- I. After bids are opened and publicly read, the bids will be tabulated for comparison on the basis of the bid prices and quantities shown in the bid. Until final award by the City of Farmington, the City reserves the right to reject any or all bid submittals, to waive technicalities, to re-advertise, or proceed to do the work otherwise when the best interests of the City will be realized hereby.

Bids will be considered irregular if they show any omissions, alteration of form, additions, conditions not called for, or irregularities of any kind. However, the City reserves the right to waive any irregularities and to make the award in the best interest of the City.

- J. The City reserves the right to reject any or all bids, and all bids submitted are subject to this reservation. Bids may be rejected, among other reasons, for any of the following specific reasons:

1. Bids received after the time limit for receiving bids as stated in the advertisement.
2. Bid containing any irregularities.
3. Unbalanced value of any items.

- K. Bidders may be disqualified and their bids not considered, among other reasons, for any of the following specific reasons:
1. Reason for believing collusion exists among the Bidders.
  2. Reasonable grounds for believing that Bidder is interested in more than one bid for work contemplated.
  3. The Bidder being a party to any past, present, or a current interest of future litigation against the City.
  4. The Bidder being in arrears on any existing contract or having defaulted on a previous contract.
  5. Lack of competency as revealed by a financial statement, experience and equipment, questionnaires, etc.
  6. Uncompleted work which in the judgment of the City will prevent or hinder the prompt completion of additional work if awarded.
- L. The successful Bidder may not assign their rights and duties under an award without the written consent of the City's Central Purchasing Office. Such consent must not relieve the assignor of liability in event of default by their assignee.
- M. Delivery date is an important factor to the City and may be required to be a part of each bid. The City of Farmington considers delivery time to be that period elapsing from the time the individual order is placed until that order or work thereunder is received by the City at the specified delivery location. The delivery date indicates a guaranteed delivery at the requested destination. In evaluating any guaranteed date of delivery, past delivery and service performance on previous City contracts may be considered. The City reserves the right to reject any bid if the guaranteed delivery date of any Bidder is unlikely because of the non-availability of stock in the vicinity of Farmington, New Mexico or failure of the Bidder to meet guaranteed delivery dates or service performance on any previous City order.
1. The City reserves the right to demand bond or penalty to guarantee delivery by the date indicated. If order is given and the Bidder fails to furnish the materials by the guaranteed date, the City reserves the right to cancel the order without liability on its part. All prices are to be F.O.B. Destination all freight prepaid.
  2. Whenever the Contractor encounters any difficulty which is delaying or threatens to delay timely performance (including actual or potential labor disputes), the Contractor must immediately give notice thereof in writing to the Central Purchasing Office, stating all relevant information with respect thereto. Such notice must not in any way constitute a basis for an extension of the delivery or performance schedule or be construed as a waiver by the City of any rights or remedies to which it is entitled by law or pursuant to provisions herein. Failure to give such notice, however, may be grounds for denial of any request for an extension of the delivery or performance schedule because of such delay.
- N. All bids must specify terms and conditions of payment which will be considered as part of, but not control, the award of the bid. City review, inspections, and processing procedures ordinarily require thirty (30) days after receipt of invoice, materials or service. Bids which call for payment before thirty (30) days from receipt of invoice, or cash discounts given on such payment, will be considered only if the opinion of the Central Purchasing Office upon the review, inspections and processing procedures can be completed within the specified time.

1. It is the intent of the City of Farmington to make payment on completed orders within thirty (30) days of receiving invoices unless unusual circumstances arise. Invoices must be fully documented as to labor, materials and equipment provided. Orders will be placed by the Central Purchasing Office and must be given a purchase order number to be valid. All purchase orders will be paid upon completion of delivery and acceptance.
  2. Payment will not be made by the City until the vendor has been given a purchase order number, has furnished proper invoice, materials, or services, and otherwise complied with City Purchasing procedures, unless this provision is waived by the City.
- O. In case of default of the successful Bidder, the City of Farmington may procure the articles from other sources and hold the Bidder responsible for any excess cost occasioned thereby.
- P. All supplies and components to be provided under this contract must be new (not used or reconditioned, and not of such age or so deteriorated as to impair their usefulness or safety), of current productions and of the most suitable grade for the purpose intended, unless the specifications allow for reconditioned or used products.
- Q. Bidders have no claim against the City for failure to obtain information made available by the City which the Bidder could have remedied through the exercise of due diligence.
- R. The only approved contact is with the Buyer listed in this bid or their designated Central Purchasing Office representative. Bidders contacting any other City official or City employee regarding this bid may be disqualified.
- S. All bids and related documents are subject to the "Inspection of Public Records Act," Chapter 14, Article 2, NMSA 1978.
- T. By law (Section 13-1-191, NMSA, 1978) the City is required to inform Bidders of the following: (1) it is a third-degree felony under New Mexico law to commit the offense of bribery of a public officer or public employee (Section 30-24-1, NMSA, 1978); (2) it is a third-degree felony to commit the offense of demanding or receiving a bribe by a public officer or public employee (Section 30-24-2, NMSA, 1978); (3) it is a fourth-degree felony to commit the offense of soliciting or receiving illegal kickbacks (Section 30-41-1, NMSA, 1978); (4) it is a fourth-degree felony to commit the offense of offering or paying illegal kickbacks (Section 30-41-2, NMSA, 1978).
- U. Conflict of Interest: Bidder warrants that it presently has no interest and will not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of service under this contract. Bidder must notify the City's Chief Procurement Officer if any employee(s) of the requesting department or the Central Purchasing Office have a financial interest in the Bidder. If yes, the Bidder must specify the employee(s) name in their bid. If federal funding utilized for this purchase, the Central Purchasing Office will notify the requesting department of the conflict. The requesting department will notify the funding agency of the conflict.

- V. Any protest by a Bidder must be timely and in conformance with Section 13-1-172, NMSA, 1978 and applicable procurement regulations. The fifteen (15) calendar day protest period for responsive Bidders must begin on the day following the City's written notification to all responding Bidders. Protests must be written and must include the name and address of the protestor and the number assigned to this bid by the City. It also must contain a statement of grounds for protest including appropriate supporting exhibits. The timely protest must be delivered to:

Chief Procurement Officer  
Central Purchasing Office  
City of Farmington  
800 Municipal Drive (mailing) or  
805 Municipal Drive (physical)  
Farmington NM 87401-2663

- W. By submitting a response to this solicitation bid the business Bidder represents and warrants that it is not debarred, suspended, or placed in ineligibility status under the provisions of Federal Executive Order 12549.

#### **IV. Special Conditions**

- A. Periodic deliveries will be made only upon authorization of the Purchasing Department and must be made if, as, and when required and ordered by the City at such intervals as directed by said Purchasing Department.
- B. Deliveries must be to the location identified in each order within the City of Farmington.
- C. The quantities shown on the bid are estimated quantities only. The City of Farmington reserves the right to purchase more than or less than the quantities shown. In any event, the unit bid prices must govern.
- D. The contract will be awarded at the prices bid for a period of time as set forth in the bid line items.
- E. Bidder warrants that all deliveries made under the contract will be of the type and quality specified; and the Purchasing Department may reject and/or refuse any delivery which falls below the quality specified in the specifications. The City must not be held to have accepted any delivery until after an inspection of same has been made and an opportunity to exercise its right of rejection has been afforded.
- F. All manufacturers' warranties must insure to the benefit of the City, and replacement of defective materials must be made promptly upon request.
- G. Failure by the Contractor to make reasonable delivery as and when requested must entitle the Purchasing Department to acquire quantities from alternate sources wherever available, with the right to seek reimbursement from the contract for amounts, if any, paid by the City over and above the bid price.
- H. All materials delivered must be free of any and all liens and must upon acceptance thereof become the property of the City, free and clear of any material man's, supplier's, or other liens.

- I. Regardless of the award of a contract hereunder, the City retains the right to purchase the same or similar materials or items from other sources should it be determined that doing so would be in the City's best interest, based on cost and quality considerations; however, in such event, the Contractor will be given the first option of meeting or rejecting the proposed alternate sources' lower price or higher quality.
- J. Acceptance by the City of any delivery must not relieve the Contractor of any guarantee or warranty, express or implied, nor must it be considered an acceptance of material not in accordance with the specification thereby waiving the City's right to request replacement of defective material.

## **V. Instructions to Bidders**

- A. ALL OR NONE BID
- B. Whichever is deemed to be in the best interest of the City, the City reserves the right to award the bid in total, by groups of items on the basis of individual items or any combination of these; or as otherwise specified in the bid terms unless the Bidder qualifies their bid by specific limitations. Only the City is in a position to determine its own best interest, therefore the City must be the sole judge in determining the award analysis. Its decision must be final.
- C. If qualifying a bid, the Bidder must clearly state so in their bid response on a separate sheet of paper title "Exceptions to Specifications." The restriction(s) or qualifier(s) must be clearly identified. If the Bidder's pricing is subject to change if the City elects to award a category bid based on group of items or line items; or any part of the Bidder's bid is dependent upon receiving a complete category award, then the Bidder's bid response must identify these restrictions. Exemptions must indicate which items or which categories they are bidding on an "all or none" basis, they must indicate if they are qualifying their bid based on a minimum threshold dollar award limit, or any other type exemption. Bid responses with exceptions may result in rejection of the whole bid or partial line items within the bid.
- D. The Bidder has the option to offer a discount if the Bidder receives "All" of the items above listed. The bid line items have not been formatted to include the discount option. This would be considered an alternate bid and the discount(s) must be clearly identified. The line item pricing with discounts must be identified on a separate sheet of paper uploaded with their bid titled "Exceptions to Specifications" as identified herein.
  1. The City reserves the right to accept or reject any "Exceptions to Specifications" requests including terms and conditions. The Central Purchasing Office will determine whether the requested exceptions are in the best interest of the City. Only the City is in position to determine its own best interest; therefore, the City must be the sole judge in reviewing all exceptions. Its decision must be final.
- E. Award
  1. Award of the bid will be made with first consideration given to the lowest responsible, responsive Bidder meeting specifications and terms and conditions.



F. Term

1. A purchase order contract will be entered into between the City and the successful Bidder(s).

G. Termination

1. Termination for Cause - If, through any cause, Bidder fails to fulfill in a timely and proper manner Bidder's obligations under this Agreement or if Bidder violates any of the covenants, agreements, or stipulations of this Agreement, the City may order Bidder by written notice to stop the services or any portion of them until the cause for such order has been eliminated. If Bidder fails to correct the deficiency within the time period specified in such notice, which time period must be reasonable under the circumstances, the City Manager must have the right to immediately terminate this Agreement. The Bidder must be entitled to receive just and equitable compensation for any work satisfactorily completed hereunder prior to such termination.
2. Notwithstanding the above, Bidder must not be relieved of liability to the City for damages sustained by the City by virtue of any breach of this Agreement by Bidder, and the City may withhold any payments to the Bidder for the purposes of set-off until such time as the exact amount of damages due the City from the Bidder is determined.
3. Termination for Convenience - The City Manager may terminate this contract at any time by giving at least thirty (30) days' notice in writing to the Bidder. If this contract is terminated due to the fault of Bidder, item G.1, above, relative to termination must apply and no further compensation or reimbursement to Bidder must be due. If terminated for any other reason, City will reimburse Bidder for all documented out-of-pocket expenses incurred in connection with this contract.

H. Estimated Quantities

1. Quantities are estimates only. The City does not guarantee a minimum quantity to be purchased during the term of the contract. The City reserves the right to:
  - a) order more or less than the quantity listed
  - b) add or delete items from the contract
  - c) not order some items on the list
2. The City anticipates ordering in quantities as shown in the bid line items. If the Bidder's pricing is subject to change if the City elects to order less than or more than the quantity lot size identified, the Bidder must clearly identify on a separate sheet of paper titled "Order Quantity Schedule" the quantity levels where different price structures are applied.

I. Required Unit of Measure

1. Bidder must correctly extend their bid line items based on the Unit of Measure (UOM) packaging indicated for bid comparison purposes. Bidders submitting their bid with no extended pricing or total may be considered non-responsive.
2. Bids submitted are to be quoted and invoiced as per UOM listed on each bid line item. No other UOM will be accepted and the City reserves the right to reject the category or bid line item not quoted or invoiced as requested.

J. Pricing

1. No price adjustment will be approved to compensate a vendor for inefficiency or for errors or omissions in judgment or for additional profit.

K. Emergency Orders

1. The City reserves the right to surpass this bid, if successful Bidder is unable to fill an order, and buy from another immediate source in order to fulfill an emergency need.

L. Farmington Electric Utility System's Standards Committee Approval

1. All items in the bid line items are approved by the Farmington Electric Utility System's (FEUS) Standards Committee. Any items quoted that are not listed as an approved manufacturer on the specifications, will result in rejection of the bid for not meeting the bid specifications.
2. For future bids, manufacturers or representatives may submit a written request for approval to the FEUS Standards Committee, Attention: FEUS Engineering Manager, 101 N Browning Parkway, Farmington NM 87401. A product sample or presentation may be required by the FEUS Standard's Committee, depending on the complexity of the equipment. The FEUS Standards Committee meets quarterly, on the second Thursday of the month.
3. The FEUS Standards Committee has established a list of ten (10) major utilities they contact to ascertain if a product has received their approval. The major utilities must have used the item for a minimum of two (2) years, before the FEUS will consider approval. A minimum of three (3) of the major utilities contacted must affirm approval before the FEUS Standards Committee will consider placing the item on their pre-approved list. Any negative response from the major utilities could result in disapproval of the product.

M. Application of Preferences

1. Resident Business or Native American Resident Business - Per 13-1-21 and 13-1-22 NMSA, all resident Contractors or Native American Contractors, wishing to obtain in-state preference, are required to obtain a preference number and certificate with the New Mexico Department of Taxation and Revenue. It will be the sole responsibility of the Bidder requesting consideration for Resident Preference to obtain approval and a certification from the New Mexico Department of Taxation and Revenue prior to the bid opening date.
2. Resident Veteran Business or Native American Resident Veteran Business - In accordance with Sections 13-1-21 and 13-1-22 NMSA 1978 and effective July 1, 2012, a resident veteran's business or Native American Resident Business



preference has been implemented. The Taxation and Revenue Department (TRD) will be issuing a three (3) year certificate to each qualified business. Businesses are required to reapply to TRD every three (3) years with the proper documentation to renew their certificate.

3. For additional information please call 505-827-0700 or go to:  
[In-State / Veteran Preference Certification: Businesses \(newmexico.gov\)](http://newmexico.gov)
4. Per 13-1-21 H NMSA Contractor will only receive points for either resident/Native American business or resident/Native American veteran business. The points are not cumulative.
5. Per 13-1-21 J NMSA application for preference does not apply when the expenditure includes federal funds.

N. Brand-Name Specification

1. Pursuant to §13-1-165, Brand-name specification; use, the Central Purchasing Office has made a determination that only the brand-name item identified in this bid will satisfy the needs of the City. This determination has become part of this procurement file.
2. These specifications are based upon testing, design and performance criteria which have been developed by the City of Farmington as a result of extensive research and careful analysis. Subsequently, standardization on this name brand reflects the only type of MATERIALS that ARE acceptable at this time.

**VI. Specifications**

A. Intent: The City of Farmington is seeking specialty meters to complete the Advanced Metering Infrastructure (AMI) project and for reserve stock.

B. Minimum Requirements

1. The following bid is made for furnishing materials or services for the City of Farmington, San Juan County, New Mexico.
2. The Bidder declares that the amount and nature of the materials to be furnished is understood and that the nature of this bid is in strict accordance with the conditions set forth and is a part of this bid, and that there will at no time be a misunderstanding as to the intent of the specifications or conditions to be overcome or pleaded after the bids are opened.
3. All items quoted must meet or exceed City's written specifications, or in their absence, all applicable ASTM specifications.
4. All items quoted must include Manufacturer's name, product number or description, and delivery lead time.
5. All items quoted must be manufactured within the borders of the United States, unless stated otherwise in the specifications.
6. Equipment other than current year models will not be considered as responsive to the specifications. It is the intention of the City to purchase, based on the specifications, a standard production model.

7. The unit shall be completely assembled, lubricated, adjusted with all equipment including standard and extra equipment installed and the unit made ready for operation.
8. In addition to the equipment set out in the specifications, the units shall include all equipment set out in the manufacturer's literature as standard equipment. They shall include all exterior moldings, name plates, medallions, series identifications and chrome of every description that is usual for standard stock models of this series.
9. The Bidder shall attach hereto, as part of this bid, regularly printed literature published by the factory, which sets forth and describes the equipment they propose to furnish. Manufacturer's standard warranty for parts and labor must be included in bid submittal.
10. Award will be made with first consideration given to the lowest responsive, responsible vendor with a delivery time of thirty-two (32) weeks.

### C. Specific Requirements

| COF Part #  | Qty | Description                              | Material Number    | Cannon Stock #     | Class | Volts      | Wire | Form      | Type  | Style       | Existing Box | Existing Eaton #                  |
|-------------|-----|------------------------------------------|--------------------|--------------------|-------|------------|------|-----------|-------|-------------|--------------|-----------------------------------|
| 285 060 451 | 720 | RFN 420CL-G23                            | 420-ITC202SC121901 | 420-ITC202SC121901 | CL200 | 240        | 3W   | 2S        | C2SXD | NA          | Itron        | RFN420CL UC5 IT C2SXD F2S CL200   |
| 285 060 452 | 20  | RFN 530LGS4X RXR 2S CL200 w/ TOU LP Lbl  | 430-LGS402SX       | 430-ELA3S2SD23     | CL200 | 120 to 480 | 3    | 2S        | A3T   | ZDC31000080 | Itron        | RFN430ELA UC5 W/NO ZIGBEE GENERIC |
| 285 060 453 | 27  | RFN 530LGS4X RXR 3S CL20 w/ TOU LP Lbl   | 430-LGS403SX102X01 | 430-ELA3S3SD66     | CL20  | 120 to 480 | 2    | 3S        | A3T   | ZDA21000080 | Honeywell    | RFN430ELA UC5 W/NO ZIGBEE GENERIC |
| 285 060 454 | 90  | RFN 530LGS4X RXR 4S CL20 w/ TOU LP Lbl   | 430-LGS404SX042X01 | 430-ELA3S4SD33     | CL20  | 120 to 480 | 3    | 4S        | A3R   | ZDC210000L0 | Honeywell    | RFN430ELA UC5 W/NO ZIGBEE GENERIC |
| 285 060 455 | 2   | RFN 530LGS4X RXR 5S CL20 w/ TOU LP Lbl   | 430-LGS405SX062X01 | 430-ELA305SC62     | CL20  | 120 to 480 | 3    | 35S (5S)  | A3R   | ZD2210000L0 | Honeywell    | RFN430ELA UC5 W/NO ZIGBEE GENERIC |
| 285 060 456 | 225 | RFN 530LGS4X RXR 9S CL20 w/ TOU LP Lbl   | 430-LGS409SX122X01 | 430-ELA309SC23     | CL20  | 120 to 480 | 4    | 9S (8S)   | A3R   | ZD3210000L0 | Honeywell    | RFN430ELA UC5 W/NO ZIGBEE GENERIC |
| 285 060 458 | 181 | RFN 530LGS4X RXR 16S CL200 w/ TOU LP Lbl | 430-LGS416SX162X01 | 430-ELA316SC98     | CL20  | 120 to 480 | 4    | 16S (15S) | A3T   | ZD331000080 | Honeywell    | RFN430ELA UC5 W/NO ZIGBEE GENERIC |
| 285 060 459 | 244 | F4S Polyphase K-Base Meter Adapter       | SP-K4-2-4S-LED     | NA                 | NA    | NA         | NA   | NA        | NA    | NA          | NA           | NA                                |
| 285 060 460 | 124 | F9S Polyphase K-Base Meter Adapter       | SP-K7-2-9S-LED     | NA                 | NA    | NA         | NA   | NA        | NA    | NA          | NA           | NA                                |
| 285 060 457 | 5   | RFN 530LGS4X RXR 12S CL200 w/ TOU LP Lbl | 430-LGS412SX112X01 | 430-ELA312SC77     | CL200 | 120 to 480 | 3    | 12S       | A3T   | ZD531000080 | Honeywell    | RFN430ELA UC5 W/NO ZIGBEE GENERIC |

#### 1. Component Requirements

##### a) Electric Meters and AMI Modules

Only electric meters from proven entities shall be considered, these manufacturers include Itron and Honeywell. All quoted meters must be of a non-proprietary design that would accommodate AMI modules from other Bidders.

##### 1) ANSI Reference Standards

In terms of safety, performance, the meter's design, the construction, and operation, where applicable, must conform to requirements established in the ANSI standards or the latest revision thereof.

##### 2) Quality

The electric meter must be designed and constructed, excluding any replaceable battery, to have a life expectancy of at least fifteen (15) years and a failure rate of less than 0.5 % per year. The failure rate is the ratio of the number of failed meters to the number of installed meters.

### 3) Measured Parameters

As a minimum, the meter must be capable of measuring the parameters listed in the Table 4.1 below. If a parameter designation is not included, it is assumed that it is not applicable to this project.

The following are general requirements for AMI Electric Meters.

R—Commissioning Phase or Full Deployment Requirement

FR—Future Requirement

NTH—Nice to Have

Blank—not required

### 4) Programming

Table 4.1

| Measured Parameter                           | System-Wide Electric Meter Requirements (Phases 1 & 2) |         |
|----------------------------------------------|--------------------------------------------------------|---------|
|                                              | Residential                                            | C&I     |
| Energy measurement (kWh)                     |                                                        |         |
| Forward                                      | R                                                      | R       |
| Reverse                                      | R                                                      | R       |
| Demand Metering                              |                                                        |         |
| Last Interval Demand (kW)                    | R                                                      | R       |
| Peak kW Demand                               | R                                                      | R       |
| Periodic Data                                |                                                        |         |
| Usage (kWh)                                  | R                                                      | R       |
| Reactive power (kVAR/kVARh and/or kVA/kVAh)  | NTH                                                    | R       |
| Voltage                                      | R                                                      | R       |
| Min/Max Voltage                              | R                                                      | NTH     |
| Current                                      |                                                        | R       |
| Frequency                                    | NTH                                                    | R       |
| TOU                                          | R                                                      | R       |
| Data interval, Maximum                       | 1 hour                                                 | 15 min. |
| Monitoring                                   |                                                        |         |
| Unsolicited Voltage out of limit (high, low) | R                                                      | R       |
| Unsolicited Outage Alarm                     | R                                                      | R       |
| Unsolicited Outage Restoration Notification  | R                                                      | R       |
| Load side voltage present w/disconnect       | R                                                      |         |
| Tamper                                       | R                                                      | R       |
| Blink count                                  | R                                                      | R       |
| Remote Disconnect                            | R                                                      |         |
| Firmware over the air (OTA) upgradable       | R                                                      | R       |

A file on meter programming must be provided per meter shipment.

Firmware upgrades for the AMI module should be accomplished remotely over the AMI network without field visits.

The capability of changing configuration settings should be available without removing units, or visiting the location. It is strongly desired that these changes will occur over the Network.

5) Data Retention

The system must utilize a centralized database as a repository for integration, and access by all business and analytical systems, and users of the meter data throughout Farmington Electric Utility System.

All meter billing data should persist in the meter for a minimum forty-five (45) days for 2 channels of 15 minute data.

6) Accuracy

The meter must meet or exceed the accuracy specifications contained in ANSI specifications over its entire service life without the need for adjustment.

7) Meter Forms, Voltages, and Classes.

Please see the Bid Line Items provided in the online bidding system for appropriate quantities.

8) Power Quality

It is desired that the meters should be able to measure line voltage.

The meter should be able to profile the average RMS voltage.

9) Remote Disconnect Switch

There must be option for an electric meter remote disconnect under the glass for all meter types.

The disconnect device should be capable of disconnection and connecting the metering load and be capable of operating safely at 200 amps.

The system must provide verification of the device's status after operation.