LOS ALAMOS

ADVANCED METERING INFRASTRUCTURE

EQUIPMENT, PARTS, SUPPLIES, INSTALLATION, SOFTWARE AS A SERVICE LICENSING, AND SUPPORT AGREEMENT

AGR#19-912

BY AND BETWEEN

THE INCORPORATED COUNTY OF LOS ALAMOS
AND
FERGUSON, INC.

ATTACHMENT A

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**INCORPORATED COUNTY OF LOS ALAMOS
SERVICES AGREEMENT**

This **SERVICES AGREEMENT** ("Agreement") is entered into by and between the **Incorporated County of Los Alamos**, an incorporated county of the State of New Mexico ("County"), and **Ferguson, Inc**. a Virginia corporation ("Ferguson" or "Contractor").

I.   RECITALS

This Agreement is entered into by and between the **Incorporated County of Los Alamos**, an incorporated county of the State of New Mexico ("County"), and **Ferguson, Inc**. a Virginia corporation ("Ferguson" or "Contractor"), to be effective for all purposes on the date of last signature below.

WHEREAS, the County Purchasing Agent determined in writing that the use of competitive sealed bidding was either not practical or not advantageous to County for procurement of the Services and County issued Request for Proposals No. 17-32 ("RFP") on January 25, 2017, requesting proposals for Advanced Metering Infrastructure ("AMI"), as described in the RFP; and

WHEREAS, Ferguson timely responded to the RFP by submitting a response dated April 11, 2017 ("Ferguson's Response"); and

WHEREAS, based on the evaluation factors set out in the RFP, Ferguson was the successful Offeror for the services listed in the RFP; and

WHEREAS, the Board of Public Utilities recommended and approved of this Agreement at a public meeting held on August 15, 2018; and

WHEREAS, the County Council approved this Agreement at a public meeting held on August 28, 2018; and

WHEREAS, Ferguson will provide the Services, as described below, to County.

NOW, THEREFORE, for and in consideration of the premises and the covenants contained herein, County and Ferguson agree as follows:

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II.   SERVICES:

A. Purpose.

1. The purpose of this Agreement between the Parties is for Contractor to procure, deliver install and make functional, in accordance with the requirements set forth herein, the public utility metering parts, supplies, equipment ("AMI Equipment") and Software (as defined herein) necessary to allow County to remotely monitor and collect County utility customer billing information for gas, water and electric services through the use of the AMI Equipment ("Project" or collectively, the "Services" or "Work"). The combination of AMI Equipment, Software and Services that will be acquired hereunder by County from Contractor and any required third parties including Sensus USA Inc. shall collectively be referred to as the "System." The Project is to automate the reading of gas, water, and electric meters throughout the utility system and to provide remote functionality for meter maintenance, meter reading, account servicing, and two-way communications to customer locations throughout the service area pursuant to the parameters provided in the RFP and as proposed and accepted by County in the Contractor's proposal ("Proposal"). The Project is divided into several key stages which begins with a Pilot Test installation and testing of Contractor's supplied parts and services ("Phase 1"). Once the first phase of the installation is completed, tested, and approved by County, County shall then issue to Contractor authorization to proceed with installation of the remaining metering parts, supplies and installation services ("Phase 2"). The specific Project related deliverables, schedules, deadlines, and mutual responsibilities of the Parties are more fully provided below. **IT IS SPECIFICALLY UNDERSTOOD AND AGREED BY THE PARTIES THAT THIS IS A PERFORMANCE AGREEMENT AND THAT CONTRACTOR OR ITS SUPPLIER SHALL BE RESPONSIBLE FOR ANY AND ALL SERVICES, SOFTWARE, SUPPORT, AND EQUIPMENT NECESSARY TO DELIVER TO COUNTY A FULLY FUNCTIONAL AND OPERATIONAL ADVANCED METERING INFRASTRUCTURE ("AMI") PROJECT, SUBJECT TO ONLY THE EXPRESSED LIMITATIONS IDENTIFIED IN CONTRACTOR'S PROPOSAL, INCORPORATED BY REFERENCE HERE, AND THIS AGREEMENT.** The Agreement and exhibits, where attached hereto or included by reference ("Contract Documents") are complementary; what is required by one is as binding as if required by all. It is the intent of Agreement to describe a functionally complete project to be constructed in accordance with the Contract

Documents. Any labor, documentation, services, materials, or equipment that reasonably may be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the indicated result will be provided whether or not specifically called for, at no additional cost to County. Any required repairs or replacements of Meter Bases shall be the responsibility of County. Any electrical work required to energize SENSUS network equipment (e.g. transformer, cable drop) shall be the responsibility of County. Any maintenance or repairs required of water and gas meters and pits/cans, unless otherwise agreed or provided herein, shall be the responsibility of County.

2. County Responsibilities. Ferguson agrees to provide the Services and Equipment as set forth in Exhibit A, Exhibit B, Exhibit C, and Exhibit D, as coordinated with County pursuant to Exhibit E, and County agrees to provide all necessary management, supervision, resources and materials required (but not to be supplied by Ferguson hereunder) to permit Ferguson to provide the Work as set forth herein, including but not limited to:

   a. providing Ferguson, in a timely manner and at no cost to Ferguson, with assistance, information, data, and materials specified as County responsibility in Exhibit B and C or which Ferguson reasonably deems necessary for the performance of the Services;

   b. agreeing to be bound by the provisions of any direct license agreements applicable to software provided to County, if any, in connection with the System;

   c. providing Ferguson Personnel with such access to County's property and County Personnel as may be necessary for Ferguson to perform the Services;

   d. complying with all applicable federal and state laws and regulations, and any of County's, but not others, procedures, and complying with Ferguson's and any sub-contractor's reasonable safety requests;

   e. devoting sufficient time and resources, including qualified personnel, to perform its obligations in accordance with this Agreement; and

   f. ensuring that County Personnel cooperate with Ferguson in the timely and efficient performance of Ferguson's obligations under this Agreement.

B. Software Licensing & Support Services.

As part of the Project, Contractor's supplier, Sensus USA, Inc. ("Sensus"), shall license to County the use of proprietary enterprise and end-user software ("Software") through a software license and spectrum agreement and provide Software technical support services through a

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support agreement, between Sensus and the County. Attached hereto as Exhibit D is Contractor's agent executed license and technical support agreement ("License and Technical Support Agreement"). Contractor further agrees and warrants that any Software it or its supplier provides, including network components, shall perform according to the RFP and Proposal and Exhibit C. Contractor further agrees and warrants that:

   a. The Software fully meets the functionality requirements as provided in Contractor's Response to County's RFP, both incorporated herein by reference.

   b. Contractor shall directly bill County for the one-time License fee(s) and is solely responsible for remitting any or all fees to Sensus or agent for the Software. The one-time license fee is for integration and training and does not include software licensing terms and conditions which is pursuant to separate agreement between the County and Sensus. Contractor will bill fees under the software licensing agreement and pass those fees through to Sensus.

C. Project Schedule and Time for Performance.
   a. <u>Project Schedule</u>. Ferguson shall meet with County onsite within thirty (30) days after the execution of this Agreement to develop the final Project Schedule and the Project and Work shall begin shall begin as agreed in the final project schedule. Ferguson and County shall designate project managers who shall have primary responsibility for monitoring the Project Schedule to ensure that the milestone and/or delivery dates shown in the Project Schedule are met and who shall be the designated point of contact for receiving notices as provided below. The proposed timeline and schedule, including the estimated time for each milestone of the Project and Project Schedule is attached hereto as Exhibit E. The draft schedule shall be modified by the parties as provided in this paragraph to accomplish the purpose of this Agreement.
   b. Ferguson and its agents or contractors shall use commercially reasonable efforts to perform the Work as set forth in Exhibit A, Exhibit B, Exhibit C, and Exhibit D and in accordance with the schedule developed in accordance with the agreed upon Project Schedule. County understands and agrees that the ability of Ferguson to make such deliveries and provide such Service within such times is dependent upon the timely issuance of purchase orders by County (if required) and the timely performance of County's obligations hereunder, and County agrees that it will use commercially

reasonable efforts to perform their respective obligations in a timely fashion and to reasonably cooperate with Ferguson.

c. Neither Party shall be liable to the other for failure or delay in performance of a required obligation if such failure or delay is caused by an act or omission of the other Party or a third party or is due to a cause outside the ability of either party to control through commercially reasonable efforts.

d. Neither Party shall be liable to the other for failure or delay in performance of a required obligation if such failure or delay is caused by unavoidable delays in shipment, delivery or taking receipt of any items sold hereunder, including delays caused by Ferguson's suppliers, or loss or damage thereto, acts of God, acts of the other Party, acts of civil, regulatory or military authority, U.S. Governmental restrictions or embargoes, war, terrorism, riot, fires, strikes, flood, epidemics, quarantine, restrictions, unavoidable delays in transportation or uncontrollable difficulties in obtaining necessary materials, labor or manufacturing facilities due to such causes, or any other cause beyond a Party's reasonable control. In the event of such occurrence, performance shall be suspended to the extent made necessary by such forces, and the time for performance shall be extended by a period equal to the time of delay. Upon the occurrence of such an event the Party whose performance is adversely affected shall promptly notify the other Party of the nature and extent of the occurrence and the anticipated period of delay in performance. No event described in this Section A (3) shall excuse any obligation to pay any amount due to the other Party.

D. Deployment Plan:

Contractor shall accomplish the Work in two phases. Phase I shall mean initial deployment as defined and provided in the RFP and Contractors Proposal. Phase I shall end on the date of Final System Acceptance as defined herein. Phase II shall commence upon the completion of Phase I and shall mean deployment within the remaining service territory of County not covered in Phase I. Contractor shall provide a final Deployment Plan within thirty (30) day from the effective date of this agreement. System acceptance shall be pursuant to Exhibit F, attached hereto and incorporated by reference.

E. Coverage Commitment:

1. Ferguson agrees to satisfy the Coverage Commitment as defined herein for the duration of the Coverage Commitment Term.

2. Coverage Commitment shall mean reaching ninety-eight point five percent (98.5%) of the installed base of active electric, gas, and water meters over a five day reading window via on-request read twenty four (24) hours per day and seven (7) days a week in all weather conditions, excluding non-reporting meter/modules found to be in failure due to County-side problems (such as meter tampering, a damaged meter, a damaged transformer, or other County-related or non-AMI related problem), and except for a Force Majeure event.

3. Provided County maintains system to Manufacturer's requirements and keeps System Support current, Coverage Commitment Term shall mean five (5) years from the date that ninety-five percent (95%) of electric, gas, and water AMI meters and modules are installed and have associated with the AMI master system.

4. Regardless of the number of towers or collectors quoted in the pricing schedule, Ferguson must achieve the Coverage Commitment. In the event the Coverage Commitment is not met, the costs of additional equipment, including additional collectors, repeaters, base stations, higher towers/poles, etc., will be the responsibility of Ferguson.

5. The County shall calculate the meter read rate monthly and summarize the information according to categories agreed upon by both the County and Ferguson. County shall make the summary information available to Ferguson.

6. County will investigate any meter read rates less than required above within fifteen (15) days and report County's findings to Ferguson in writing according to Ferguson's instructions. Both County and Ferguson will work together to determine an acceptable strategy to resolve the problem within fifteen (15) days after the County notifies Ferguson of the problem. Once a strategy is identified, Ferguson and County commit to resolve the source of the failure in a timely manner.

F. Equipment Forecasts:

Within thirty (30) days after the Effective Date of this Agreement, Ferguson shall supply to County a written forecast of total anticipated Ferguson Equipment needs by month. Any changes to the Equipment forecast should also be furnished by Ferguson. Failure to provide an accurate forecast, within reason, may negate the stated Ferguson Equipment lead times and may adversely impact delivery of product to County.

G. Licenses.

Ferguson shall provide to County all necessary licenses (i.e., software and others as may apply) for the System and the Work. These licenses shall be paid in full and permanent and provide all

rights described in this Agreement regardless of whether or not such rights are included in any license agreement form made part of this Agreement or applied otherwise.

H. Right to Use Accepted System:

County shall have the right to use, modify, and adapt the System in any manner it desires as long as it is in accordance with the terms and conditions of this Agreement and the Software License and User agreement between County and Sensus.

I. Right to Use System Not Yet Accepted:

During the testing period, County shall have the right to use System that has been installed even if not yet accepted by County. Use of the System shall not result in any waiver of any County rights under this Agreement. The use of the System is primarily conducted as a System Acceptance Test ("SAT") prior to the Final System Acceptance. If the System is in productive use for more than six (6) months, it shall be deemed accepted. Upon completion of the SAT for Phase I, County shall have the right to fully utilize all portions of Phase I during the implementation of Phase II. These rights survive this Agreement.

J. Tests and Inspections:

The equipment furnished pursuant to the Specifications shall be in compliance with all of the standard commercial inspections and tests normally performed by Ferguson and its Sub-contractors or other Fergusons. Ferguson shall furnish the County with such certified information and test certificates as are normally made available to customers of Ferguson's manufacturing divisions and subsidiaries and other manufacturers of equipment specified within. County or its agent has the right to witness all factory and/or site tests and inspections. The County shall not be required to accept any equipment until the equipment has undergone and successfully met such tests and inspections.

K. System Acceptance Test.

1. The term "Final System Acceptance" means the County has, within six (6) months of installation, accepted the Work, or portion thereof provided by Ferguson after County has performed a System Acceptance Test, the results of which County has determined, in County's sole discretion, to be satisfactory.

2. Ferguson and County will complete a System Acceptance Test ("SAT") to validate the completion of the Phase I, in accordance with the requirements specified in this

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Agreement and the Functional Testing and System Acceptance Testing Criteria set forth in the attached Exhibit F.

3. If all testing meets the pass criteria as set forth in Exhibit F, the SAT will be considered successful. Final System Acceptance, as that term is used herein, shall occur on the date County indicates in writing its acceptance of satisfactory completion of the SAT, which acceptance shall be provided within ten (10) days of the successful completion of the SAT. In the event pass criteria cannot be met or a defined functionality requirement cannot be remedied as part of the testing, Ferguson shall notify the County in writing as soon as is practicable and suggest alternate remedies to resolve the problem without further costs to the County. In all such cases, the County, without stating any reasons, reserves the right to accept or reject any and all remedies proposed by Ferguson and treat this as a breach of contract.

L. Major Meter/Module Failure:

1. If in the first seven (7) years following the signing of this Agreement, a major failure occurs with the meters and/or modules provided by Ferguson (with "major" being defined as five percent (5%) of the installed base within any rolling twelve (12) month period), Ferguson shall provide County replacement meters and/or modules as needed in excess of the 5% at no cost and pay for shipping.

2. Meter/module failures will be tracked by the County and reported to Ferguson on a mutually agreed schedule.

M. System Life Expectancy:

Ferguson represents and warrants that the installation services performed by Ferguson shall be completed in a good and workmanlike manner in accordance with industry standards. Work, System and AMI equipment purchased from Ferguson or its supplier shall be supported for a minimum of twelve (12) years from the date of Final System Acceptance, said term being the Life Expectancy. Ferguson shall make available spare parts for all equipment ordered under this Agreement and corrections for any software ordered for the Life Expectancy of the System, starting from the date of Final System Acceptance. In the event System support is terminated by Ferguson during the term of the Life Expectancy, other than for Force Majeure, the County shall receive compensation pro-rated based on the initial cost of the contracted goods and services. All equipment provided by Ferguson shall be warranted by Sensus and copies of all such

warranties are attached hereto as Exhibit G. Ferguson, as an authorized distributor of Sensus, will coordinate warranty service with Sensus on behalf of County.

N. Defective Work and System (Warranty):

1. Ferguson warrants that the installation of System for one year from date of acceptance of the System. Any defective installation shall be corrected by Ferguson within fourteen (14) days after receipt of notice from County.

2. All equipment shall be warranted by Sensus as set forth in Exhibit G. Ferguson, as authorized distributor for Sensus, will coordinate all warranty service on behalf of County.

3. Any repairs or replacements made to Ferguson's System during the warranty period shall be warranted for the remaining term of such warranty period or 180 days, whichever is longer. All manufacturer warranties will be assigned to County. During the manufacturer's warranty period, Ferguson shall coordinate all service on such warranties, and County may rely upon and deal only with Ferguson with respect to such warranties. Ferguson warrants that the sale, use, or incorporation into manufactured products of all machines, parts, components, services, devices, material and rights furnished or licensed hereunder which are not of County's design, composition or manufacture shall be free from any patent, copyright, trademark, or other proprietary rights for the payment of any license fee or royalty to others by County. Ferguson shall be liable for and save County harmless from any loss, damage, or expense whatsoever that County may suffer from Ferguson's breach of any of these warranties.

4. Ferguson warrants that the Work shall be performed and the System provided in the manner set forth in the Agreement. Ferguson warrants that the Work will comply with and has been delivered, and sold in conformity with all applicable federal, state, and local laws and administrative regulations and orders. The foregoing warranties will survive inspection, testing, delivery, installation, and payment and shall run in favor of the County and his successors and assigns.

5. Ferguson shall deliver to the County all Original Equipment Manufacturer ("OEM") warranty documentation prior to receiving final payment for the Work. All warranties begin on date of the formal Final System Acceptance.

O. Zero Consumption (Zero Usage) Meters.

1. County shall provide Ferguson a "zero consumption" report for all deployed meters once per week during both the Phase I and Phase II deployment timeframe. The zero-

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consumption report will list all meters that have not recorded any consumption within 24 hours of installation.

2. Upon receiving the daily zero consumption report, County's personnel will review the meters listed on the report and remove meters listed as zero consumption due to legitimate, County-side reasons such as a meter located at a vacant property.

3. Remaining zero consumption meters will be replaced by Ferguson at no cost to County.

P. Non-Associating Meters.

1. If County finds that a recently installed meter has not associated with the AMI master system within 24 hours of the installation time during Phase I and Phase II Deployment, County will dispatch personnel to visit the meter. If the meter is found to be defective, the electric, gas, or water meter/module will be replaced by County. The defective meter's/module's serial number will be reported to Ferguson and the meter/module returned to Ferguson for replacement at no cost, plus reimbursement for installation costs as specified above.

2. For both zero consumption and non-associating meters/modules, Ferguson will examine the defective meter/module and report the cause of meter/module failure to County within a 30-day period. If the diagnosis leads Ferguson or County to suspect other meters may have the same defect, Ferguson will identify the appropriate serial numbers. Ferguson will then dispatch technicians to County offices to identify and recover defective meters/modules and ship them to the appropriate location for repair or further inspection at no cost to the County.

Q. Meter/Module Replacement for Zero Consumption and Non-Associating Meters:

1. For all zero consumption and non-associating meter/modules discovered during Phase I and Phase II Deployment and any warranty period, Ferguson shall provide County replacement meters and/or modules as needed at no cost and pay for shipping, plus one hundred dollars ($100) per meter and/or module to reimburse County for installation costs to install the new meters and/or modules.

2. Coverage Commitment Testing relates specifically to coverage of the radio frequency ("RF") signals to meters/modules located at County customer sites. This procedure will test for zero consumption (zero usage) and meter/module or non-associating meter/modules (described below).

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R. Cancellation and Modifications:

County may, without penalty, cancel or reduce an Equipment Order on written notice to Ferguson no later than sixteen (16) weeks prior to scheduled delivery of the Equipment Order. County may not cancel or modify an Equipment Order within sixteen (16) weeks prior to delivery. Notwithstanding the foregoing, cancellation charges do not apply to Software or Services Orders which will be established in a separate Software services agreement, or as provided below.

III.   TERM:

The term of this Agreement shall commence on the date of last signature below and shall continue for four (4) years and can be renewed by mutual written agreement the parties for three one-year periods, unless otherwise provided herein. Contractor's responsibilities after the Final System Acceptance shall include transmittal of Sensus payments and coordination of warranty services on behalf of Sensus, and other requirements as provided herein.

IV.   COMPENSATION:

A. Amount of Compensation.

County agrees to purchase the Materials and Services, as set forth in Exhibits A from Ferguson and Sensus. Ferguson agrees to sell to County the Materials and Services at the prices and in the quantities set forth on Exhibit A, as applicable, and on the terms and conditions set forth in this Agreement. County shall pay compensation for performance of the Services in an amount NOT TO EXCEED **FIVE MILLION FIVE HUNDRED FIFTY-NINE THOUSAND, FOUR HUNDRED EIGHTY DOLLARS** (**$5,559,480**), which amount does not include applicable New Mexico gross receipts taxes ("NMGRT").

B. Payment to Ferguson:
1. Ferguson will issue invoices to County for all amounts owed to Ferguson hereunder. Invoices: (i) for Work and Services will be issued upon completion of the Work or Service; and (ii) for the System shall be issued upon shipment of the System.
2. Contractor shall provide a performance bond in the amount of the total contract price for the duration of all phases of the project until completion of final acceptance of the Project.
3. The "Milestone Description" as stated below in the Milestone Schedule is provided as a summary only; this entire Agreement provides the detail of what comprises deliverables for each Milestone.

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Table 1: Milestone Payment Schedule

Milestone	Description	Payment
Phase I*	Initial Deployment Area	100% of completed work billed monthly. All invoices shall provide sufficient documentation to support each billing/invoice.
SAT	Successful completion of the System Acceptance Test (SAT) for the Phase I Initial deployment area.	
Phase II	Full Deployment	After successful completion of the SAT for Phase 1, and starting with the Phase II full deployment, Ferguson may invoice 100% of the actual cost on a monthly basis for all equipment and items associated with the Phase II deployment area according to a mutually accepted schedule.

4. *Phase I shall include, but not be limited to:

   a. Project design meeting; receipt of standard System documentation and training manuals covering the scope of this Agreement; review and approval of County's coverage area and design drawings for the initial deployment area; receipt of proof of insurance.

   b. Configuration of Master System server and hardware components and delivery of configured software and hardware to County; training on use of the AMI Master software System.

   c. Application for and delivery of Licensed Frequency(ies) necessary for operation of the system.

   d. Delivery of Phase I base stations, collectors, repeaters, load management end devices, gateways, electric meters and/or modules as determined prior to Agreement signing.

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e.   Completion of onsite support and training covering equipment installation, meter/module, inspection of work and training installation, Master System training including support on report generation.

f.   Once Phase I is complete and accepted pursuant to the SAT, or as may be mutually agreed by the parties, Contractor shall then begin Phase II.

5. County will pay Ferguson by no later than thirty (30) days from receipt of each accurate monthly statement with a late fee of one and one-half percent (1.5%) of the invoiced amount if not paid in the thirty (30) day period.

6. After delivery and inspection at destination, the County will be responsible for any loss, theft, physical damage, or abuse that affects the operation of the System and occurs while System is in the control of the County.

7. Notwithstanding any provision in this Agreement to the contrary, County may withhold any or all payment or payments for Work done to the extent of protecting County against loss on account of:

a. Defective workmanship and materials;

b. Failure of Ferguson to make payments promptly to Sub-contractors or Fergusons for material or labor.

8. Unless otherwise provided for in the Agreement, all prices for Work and Equipment are firm and fixed.

V.   TAXES:

Ferguson shall be solely responsible for timely and correctly billing, collecting and remitting all local, state, or federal taxes that may be levied on the amounts payable under this Agreement.

VI.   STATUS OF FERGUSON, STAFF, AND PERSONNEL:

This Agreement calls for the performance of services by Ferguson as an independent contractor. Ferguson is not an agent or employee of County and will not be considered an employee of County for any purpose. Ferguson, its agents or employees shall make no representation that they are County employees, nor shall they create the appearance of being employees by using a job or position title on a name plate, business cards, or in any other manner, bearing the County's name or logo. Neither Ferguson nor any employee of Ferguson shall be entitled to any benefits or compensation other than the compensation specified herein. Ferguson shall have no authority to bind County to any agreement, contract, duty or obligation.   Ferguson shall make no

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representations that are intended to, or create the appearance of, binding County to any agreement, contract, duty, or obligation. Ferguson shall have full power to continue any outside employment or business, to employ and discharge its employees or associates as it deems appropriate without interference from County; provided, however, that Ferguson shall at all times during the term of this Agreement maintain the ability to perform the obligations in a professional, timely and reliable manner.

VII. STANDARD OF PERFORMANCE:

Ferguson agrees and represents that it has and will maintain the personnel, experience and knowledge necessary to qualify it for the particular duties to be performed under this Agreement. Ferguson shall perform the Services described herein in accordance with a standard that meets industry standard of care for performance of the Services.

VIII. DELIVERABLES AND USE OF DOCUMENTS:

All deliverables required under this Agreement, including material, products, reports, policies, procedures, software improvements, databases, and any other products and processes, whether in written or electronic form, shall remain the exclusive property of and shall inure to the benefit of County as works for hire; Ferguson shall not use, sell, disclose, or obtain any other compensation for such works for hire. In addition, Ferguson may not, with regard to all work, work product, deliverables or works for hire required by this Agreement, apply for, in its name or otherwise, any copyright, patent or other property right and acknowledges that any such property right created or developed remains the exclusive right of County. Ferguson shall not use deliverables in any manner for any other purpose without the express written consent of the County.

IX. EMPLOYEES AND SUB-CONTRACTORS:

Ferguson shall be solely responsible for payment of wages, salary or benefits to all employees or sub-contractors retained by Ferguson in the performance of the Services. Ferguson agrees to indemnify, defend and hold harmless County for all claims that may arise from Ferguson's relationship to its employees and sub-contractors.

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X. INSURANCE:

Ferguson shall obtain and maintain insurance of the types and in the amounts set out below throughout the term of this Agreement with an insurer acceptable to County. Ferguson shall assure that all sub-contractors maintain like insurance. Compliance with the terms and conditions of this Section is a condition precedent to County's obligation to pay compensation for the Services and Ferguson shall not provide any Services under this Agreement unless and until Ferguson has met the requirements of this Section. County requires Certificates of Insurance or other evidence acceptable to County that Ferguson has met its obligation to obtain and maintain insurance and to assure that sub-contractors maintain like insurance. General Liability Insurance and Automobile Liability Insurance shall name County as an additional insured.

A. General Liability Insurance:
$1,000,000 combined single limit per occurrence; $2,000,000 aggregate.

B. Workers' Compensation:
In an amount as may be required by law. County may immediately terminate this Agreement if Ferguson fails to comply with the Worker's Compensation Act and applicable rules when required to do so.

C. Automobile Liability Insurance for Ferguson and its Employees:
An amount at least equal to the minimum required by state law on any owned, and/or non-owned motor vehicles used in performing Services under this Agreement.

XI. RECORDS:

Ferguson shall maintain, throughout the term of this Agreement and for a period of six (6) years thereafter, records that indicate the date, time, and nature of the services rendered. Ferguson shall make available, for inspection by County, all records, books of account, memoranda, and other documents pertaining to County at any reasonable time upon request.

XII. APPLICABLE LAW:

Ferguson shall abide by all applicable federal, state and local laws, regulations, and policies and shall perform the Services in accordance with all applicable laws, regulations, and policies during

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the term of this Agreement. In any lawsuit or legal dispute arising from the operation of this Agreement, Ferguson agrees that the laws of the State of New Mexico shall govern. Venue shall be in the First Judicial District Court of New Mexico in Los Alamos County, New Mexico.

XIII.　NON-DISCRIMINATION:

During the term of this Agreement, Ferguson shall not discriminate against any employee or applicant for an employment position to be used in the performance of the obligations of Ferguson under this Agreement, with regard to race, color, religion, sex, age, ethnicity, national origin, sexual orientation or gender identity, disability or veteran status.

XIV.　INDEMNITY:

Ferguson shall indemnify, hold harmless and defend County, its Council members, employees, agents and representatives, from and against all liabilities, damages, claims, demands, actions (legal or equitable), and costs and expenses, including without limitation attorneys' fees, of any kind or nature, arising from Ferguson's performance hereunder or breach hereof and the performance of Ferguson's employees, agents, representatives and sub-contractors.

XV.　FORCE MAJEURE:

Neither County nor Ferguson shall be liable for any delay in the performance of this Agreement, nor for any other breach, nor for any loss or damage arising from uncontrollable forces such as fire, theft, storm, war, or any other force majeure that could not have been reasonably avoided by exercise of due diligence.

XVI.　NON-ASSIGNMENT:

Ferguson may not assign this Agreement or any privileges or obligations herein without the prior written consent of County.

XVII.　LICENSES:

Ferguson shall maintain all required licenses including, without limitation, all necessary professional and business licenses, throughout the term of this Agreement. Ferguson shall require and shall assure that all of Ferguson's employees and sub-contractors maintain all required licenses including, without limitation, all necessary professional and business licenses.

XVIII.   PROHIBITED INTERESTS:

Ferguson agrees that it presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of its services hereunder. Ferguson further agrees that it will not employ any person having such an interest to perform services under this Agreement. No County Council member or other elected official of County, or manager or employee of County shall solicit, demand, accept or agree to accept a gratuity or offer of employment contrary to Section 31-282 of the Los Alamos County Code.

XIX.   TERMINATION:

A. Generally.

County may terminate this Agreement with or without cause upon thirty (30) days prior written notice to Ferguson, or as provided herein. Upon such termination, Ferguson shall be paid for Services actually completed to the satisfaction of County at the rate set out in Section C. Ferguson shall render a final report of the Services performed to the date of termination and shall turn over to County originals of all materials prepared pursuant to this Agreement.

B. Funding.

This Agreement shall terminate without further action by County on the first day of any County fiscal year for which funds to pay compensation hereunder are not appropriated by the County Council. County shall make reasonable efforts to give Ferguson at least ninety (90) days advance notice that funds have not been and are not expected to be appropriated for that purpose.

XX.   NOTICE:

Any notices required under this Agreement shall be made in writing, postage prepaid to the following addresses, and shall be deemed given upon hand delivery, verified delivery by telecopy (followed by copy sent by United States Mail), or five (5) days after deposit in the United States Mail:

County:	Ferguson:
Tim Glasco, Utility Manager	Bob Ferlic
Incorporated County of Los Alamos	Ferguson, Inc.
Department of Public Utilities	452 N Locust Grove Road
1000 Central Avenue	Meridian, Idaho 83642

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Los Alamos, New Mexico 87544

XXI. INVALIDITY OF PRIOR AGREEMENTS:

This Agreement supersedes all prior contracts or agreements, either oral or written, that may exist between the parties with reference to the services described herein and expresses the entire agreement and understanding between the parties with reference to said services. It cannot be modified or changed by any oral promise made by any person, officer, or employee, nor shall any written modification of it be binding on County until approved in writing by both County and Ferguson.

XXII. CAMPAIGN CONTRIBUTION DISCLOSURE FORM:

A Campaign Contribution Disclosure Form was submitted as part of Ferguson's Response and is incorporated herein by reference for all purposes. This Section acknowledges compliance with Chapter 81 of the Laws of 2006 of the State of New Mexico.

IN WITNESS WHEREOF, the parties have executed this Agreement on the date(s) set forth opposite the signatures of their authorized representatives to be effective for all purposes on the date first written above.

ATTEST   **INCORPORATED COUNTY OF LOS ALAMOS**

_____   **BY:** _____
NAOMI D. MAESTAS   **TIMOTHY A. GLASCO, PE**   **DATE**
COUNTY CLERK   **UTILITIES MANAGER**

Approved as to form:

_____
J. ALVIN LEAPHART
COUNTY ATTORNEY

                                   Ferguson, Inc. a Virginia corporation

ATTACHMENT A

BY: _____

DESIGNATE OFFICIAL   DATE

DESIGNATE TITLE

ATTACHMENT A

Exhibit A. Pricing and Listing of Equipment Schedule

ATTACHMENT A

Exhibit A. Ferguson, Inc. Pricing and Equipment
Summary of Costs, Equipment, and Services

#	Category	Phase 1 Total	Full Deployment Total
1	AMI INFRASTRUCTURE: Controllers, Collectors, Gateways, Repeaters, base stations, etc.	$ 28,377	$ 61,800
2	AMI MASTER SOFTWARE AND SERVERS	$ 109,078	$
3	NEW ELECTRIC METERS	$ 36,835	$ 1,077,228
4	NEW ELECTRIC MODULES	$ -	$ -
5	GAS MODULES	$ 28,415	$ 735,442
6	WATER MODULES	$ 27,785	$ 647,093
7	INSTALLATION, TESTING, TRAINING, PROJECT MANAGEMENT - AMI	$ 259,968	$ 65,217
8	RECOMMENDED SPARE PARTS	$ -	$ -
9	TEST EQUIPMENT, TOOLS, SHIPPING, MISC.	$ 15,489	$ 5,163
10	*REQUIRED* TURNKEY METER/MODULE INSTALLATION	$ 69,819	$ 1,372,021
	Total Phase Costs	**$ 575,766**	**$ 3,963,965**
	Total Upfront Costs	**$ -**	**$ 4,539,731**
11	ANNUAL SYSTEM (SOFTWARE) COSTS	$ 99,961	$
	See Initial Deployment Detail Worksheet Section 11		
12	OPTIONAL EQUIPMENT (cost per unit, depending on your product offering)	$ -	$ -
	See Initial Deployment Detail Worksheet Section 12		
13	Optional Premise-Based AMI Costs (Phase I Initial Deployment Area & Full Deployment Area)	$ 70,000	$
	See Initial Deployment Detail Worksheet Section 13		
14	Optional MDMS Costs	$ 320,000	$
	See Initial Deployment Detail Worksheet Section 14		
15	OPTIONAL COST ADDERS FOR INCREASED COVERAGE	$	$ 44,000

ATTACHMENT A

Exhibit A.

Exhibit A. Ferguson, Inc. Pricing and Equipment-Initial Deployment Detail (Phase I)

Phase I. Initial Deployment

1	PHASE 1: AMI INFRASTRUCTURE: Controllers, Collectors, Gateways, Repeaters, base stations, etc.	Quantity	Each	Extended	Notes
1.01	Sensus M400 Base Station	1	$ 20,600	$ 20,600	
1.02	Sensus R100 Collector	2	$ 3,889	$ 7,777	
1.03			$ -	$ -	
	Total AMI Infrastructure	**3**		**$ 28,377**	

2	PHASE 1: AMI Master Software and Servers	Quantity	Each	Extended	Notes
2.01	Base master software saas -- Set up and Configuration fees	1	$ 77,410	$ 77,410	This includes setup and configuration of all hardware and software for the Head End System, Sensus Analytics for Water, Gas and Electric, Alarm Management Software, End of Line Voltage Monitoring applications for CVR.
2.02	Other annual costs - Additional Modules (Transformer Loading, Load Aggregation and Unbilled Energy)	1	$ 6,000	$ 6,000	(Year 1 Saas Fees for all 3 additional Applications)
2.03	Database license fee		$ -	$ -	
2.04	Load Management license fee for hosted system		$ -	$ -	
2.05	Interfaces from AMI for Purchaser's CIS	1	$ 5,778	$ 5,778	
2.06	Interfaces from AMI for Purchaser's ERP	1	$ 5,778	$ 5,778	
2.07	Interfaces from AMI for Purchaser's OMS	1	$ 5,778	$ 5,778	
2.08	Interfaces from AMI for Purchaser's Web Presentment Portal and Web App (Smart Utility Systems)	1	$ 8,335	$ 8,335	
2.09	Other		$ -	$ -	
	Total AMI Software & Servers	**6**		**$ 109,078**	

3	PHASE 1: NEW ELECTRIC METERS	Meter ANSI Form	Quantity	Each	Extended	Notes
3.01	Sensus iConA	Single phase 1S	1	$ 102	$ 102	
3.02	Sensus Stratus	Single phase 2S	300	$ 117	$ 35,232	
3.03	Sensus iConA	Single phase 3S	1	$ 122	$ 122	
3.04	Sensus iConA	Single phase 4S	1	$ 122	$ 122	
3.05	Sensus iConA	Single phase 5S	1	$ 122	$ 122	
3.06	Sensus iConA	Single Phase Class 320	1	$ 161	$ 161	
3.07	Sensus iConA	Single phase Demand and TOU adder	1	$ -	$ -	Included in Base Meter Price
3.08	Sensus iConA (Sensus Stratus meter for 2SRD. Available for 1S and 12S)	Single phase under glass service disconnect adder	1	$ 33	$ 33	
3.09	Elster A3 (Demand, Voltage Event, 4 Ch,LP,TOU, PQ)	Polyphase meter 9S	1	$ 258	$ 258	
3.10	Sensus iConA	Polyphase meter 12S Network 120/208	1	$ 94	$ 94	
3.11	Elster A3 (Demand, Voltage Event, 4 Ch,LP,TOU, PQ)	Polyphase meter 12S	1	$ 258	$ 258	
3.12	Elster A3 (Demand, Voltage Event, 4 Ch,LP,TOU, PQ)	Polyphase meter 16S	1	$ 258	$ 258	
3.13		Cost Adder for Demand and TOU (for polyphase meters)	1	$ -	$ -	Included in Base Meter Price
3.14	Elster A3 K2 Switch	Cost Adder for Reactive Metering (for polyphase meters)	1	$ 39	$ 39	
3.15	Sensus iConA Zigbee adder	Cost Adder for Zigbee Module (All Meters)	1	$ 33	$ 33	

ATTACHMENT A

3.16		No Cellular Communications Required		$ -
	Total Electric Meters	310		**$ 36,835**

4	**PHASE 1: NEW ELECTRIC MODULES** (If your AMI meter includes the module, please state as such, quote the meter/module combo in Section 3, and leave this section blank)			
	Meter ANSI Form	**Quantity**	**Each**	**Extended**
4.01	Single phase 1S	1	$ -	$ -
4.02	Single phase 2S	300	$ -	$ -
4.03	Single phase 3S	1	$ -	$ -
4.04	Single phase 4S	1	$ -	$ -
4.05	Single phase 5S	1	$ -	$ -
4.06	Single phase C1 320	1	$ -	$ -
4.07	Polyphase meter 9S	1	$ -	$ -
4.08	Polyphase meter 12S	1	$ -	$ -
4.09	Polyphase meter 16S	1	$ -	$ -
	Total Electric Modules	**308**		**$ -**

5	**PHASE 1: GAS MODULES**			
	GAS METER	**Quantity**	**Each Including Mounting Kit**	**Extended**
5.01	Sensus Model 100GM, 200GM	300	$ 94	$ 28,203
5.02	Sensus Model 300GM	1	$ 212	$ 212
5.03			$ -	$ -
	Total Gas Modules	**301**		**$ 28,415**

6	**PHASE 1: WATER MODULES**			
	WATER METER	**Quantity**	**Each Including Mounting Kit**	**Extended**
6.01	Sensus Single Port 520M — Residential Water	300	$ 92	$ 27,693
6.02	Sensus Single Port 520M — C&I Water	1	$ 92	$ 92
6.03			$ -	$ -
	Total Water Modules	**301**		**$ 27,785**

7	**PHASE 1: INSTALLATION, TESTING, TRAINING, PROJECT MANAGEMENT - AMI NETWORK INFRASTRUCTURE (excluding meters and modules)**	**Quantity**	**Each**	**Extended**	
7.01	Installation of collectors, repeaters, base station equipment or other AMI transport equipment for Phase I (Initial Deployment Area) *(As specified in the Responsibility Matrix)*	1	$ 25,807	$ 25,807	Installation is priced according to Ferguson Standard installation. Full Scope of work requied prior to final contract pricing. All permits are the responsibility of the customer.
7.02	Field Hardware Training & Computer Training, Special Report Generation (Turnkey training: including labor and travel expenses, etc.)	2	$ 8,333	$ 16,667	
7.03	System Acceptance Testing		$ -	$ -	Note: SAT included in 7.05 Project Management. Estimated SAT per deliverable timeline of one (1) month.
7.04	System Documentation Manuals, CDs, etc.	3	$ 1,000	$ 3,000	Note: Documentation and manuals provided after the initial standard core education and training.
7.05	Project Management	1	$ 132,761	$ 132,761	
7.06	One time RNI SaaS Setup Fee	1	$ 6,867	$ 6,867	
7.07	One Time Sensus Analytics MDMS SaaS Setup Fee	1	$ 6,867	$ 6,867	

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7.08	Sensus Software Integration	1	$ 68,000	$ 68,000	Any upgrades or Integration to the customer CIS Software is the responiblity of the Owner.
	Total Installation, Testing, Training, Project Management	**10**		**$ 259,968**	

8	PHASE 1: RECOMMENDED SPARE PARTS - MUST BE INCLUDED	Quantity	Each	Extended
8.01	Spare parts		$ -	$ -
8.02	Spare parts		$ -	$ -
	Total Spare Parts	**0**		**$ -**

9	PHASE 1: TEST EQUIPMENT, TOOLS, SHIPPING, MISC.	Description	Quantity	Each	Extended
9.01	Sensus Command Link	Test equipment, tools, and software that are necessary for the deployment of the AMI system	3	$ 452	$ 1,355
9.02	Trimble 900LE Handheld	Test equipment, tools, and software that are necessary for the deployment of the AMI system	3	$ 4,358	$ 13,075
9.03	USB Microtranciever	Test equipment, tools, and software that are necessary for the deployment of the AMI system	3	$ 353	$ 1,059
9.04	AMI System Freight Costs (Assumed to be included at no charge. If Supplier intends to bid with a freight charge, please include here.)	Freight for 100% of the system components including but not limited to: Master System, software, documentation, electric meters, electric meter modules, spare parts, servers, hardware, etc.	1	$ -	$ -
9.05	Licensed Spectrum one-time cost (if applicable)	Upfront cost to procure licensed frequency for the wireless AMI system (if applicable). **For solutions that used licensed frequencies, if no price is entered, it is implied that all costs for licensed frequency licensing are included in the AMI package and will be paid for in full by the chosen AMI Vendor at the time of system installation.**		$ -	$ -
		Total Test Equipment, Tools, and Shipping			**$ 15,489**

10	PHASE 1: REQUIRED TURNKEY METER/MODULE INSTALLATION	Description (please list what is included in installation package and name subcontractor(s) as appropriate).	Quantity	Each	Extended
10.01	Installation of all AMI single-phase meters and modules		300	$ 61.64	$ 18,492
10.02	Installation of all residential gas modules	Installation package to include: as-found meter accuracy test, transfer of meter data to utility's billing system, GPS at meter location, digital photograph of meter reading, thermal imaging scan of meter socket, meter socket replacement, and storage and disposal of old meters.	300	$ 86.99	$ 26,097
10.03	Installation of all commercial gas modules		1	$ 86.99	$ 87
10.04	Installation of all residential water modules		300	$ 83.53	$ 25,059
10.05	Installation of all commercial water modules		1	$ 83.53	$ 84
	Total REQUIRED Turnkey Electric Installation		**902**		**$ 69,819**

				Total:	**$ 575,766**

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ANNUAL COSTS (recurring costs)

11	ANNUAL SYSTEM (SOFTWARE) COSTS	Quantity	Each		Extended		
11.01	Annual System Support Costs for Hosted AMI Hardware	1	$	-	$	-	
11.02	Annual System Support Costs for Hosted Load Management Software	1	$	-	$	-	
11.03	Annual System Support Costs for Hosted MDMS Software	1	$	-	$	-	
11.04	Annual System Support Costs for Hosted Software & Licensing	1	$	87,086	$	87,086	This is the Annual Saas Fee for the Head End System, Sensus Analytics for Water, Gas and Electric, Alarm Management Software, End of Line Voltage Monitoring applications for CVR. This fee is subject to increase at 3% annually.
11.05	Annual Licensed Spectrum Use Fee (if applicable)	1	$	-	$	-	
11.06	Indicate quantity of cellular communications devices and annual cost for each (not to exceed in a 10 year period) - MUST BE INLCUDED IF QUOTING CELLULAR		$	-	$	-	
11.07	Other annual costs - Additional Modules (Transformer Loading, Load Aggregation and Unbilled Energy)	1	$	12,875	$	12,875	This is the Annual Saas Fee Years 2 and forward for all 3 additional applications (Transformer Loading, Load Aggregation, and Unbilled Energy).
	Total Annual Costs				**$**	**99,961**	

		TOTAL ANNUAL COSTS	**$**	**99,961**

OPTIONAL ITEMS AND SERVICES:

12	PHASE 1: OPTIONAL EQUIPMENT (cost per unit, depending on your product offering)	Quantity	Each		Extended	
12.01	Retrofit L+G AX Focus 2S Module	1	$	-	$	-
12.02	Single phase Wi-Fi Adder	1	$	-	$	-
12.03	Single phase Bluetooth Adder	1	$	-	$	-
12.04	Single phase Other HAN (Home Area Network) Communications Adder	1	$	-	$	-
12.05	Load Management Device 2 Relays 5A - 30A (or similar)	1	$	-	$	-
12.06	Adder for cell modem backhaul system (to collectors, base stations, etc) (*Phase I Initial Deployment Area & Full Deployment Area*)		$	-	$	-
12.07	Annual fee for optional cell modem backhaul system (*Phase I Initial Deployment Area & Full Deployment Area*)	1	$	-	$	-
12.08	Other costs as defined by Vendor	1	$	-	$	-
12.09	Other costs as defined by Vendor	1	$	-	$	-
12.09	Other costs as defined by Vendor	1	$	-	$	-
	Total Optional Equipment	9			**$**	**-**

13	Optional Premise-Based AMI Costs (Phase I Initial Deployment Area & Full Deployment Area)	Quantity	Each		Extended	
13.01	Annual fee for Supplier premise based AMI headend	1	$	35,000	$	35,000
13.02	Annual premise based AMI system fee	1	$	35,000	$	35,000
13.03	Annual premise based AMI Server Hardware	1	$	-	$	-
	Total AMI Equipment	3			**$**	**70,000**

14	Optional MDM Costs (Phase I Initial Deployment Area & Full Deployment Area)	Quantity	Each		Extended	
14.01	MDMS software license fee - Sensus LOGIC MDMS & RNI License Fee	1	$	320,000	$	320,000
14.02	MDMS annual hosted fee		$	-	$	-
14.03	Interfaces from MDMS for Purchaser's CIS		$	-	$	-
14.04	Interfaces from MDMS for Purchaser's OMS		$	-	$	-
14.05	Interfaces from MDMS for Purchaser's Web Presentment Portal and Web App (Smart Utility Systems)		$	-	$	-

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14.06	Other		$	-	$	-	$	-	
	Total AMI Equipment	**1**					**$**	**320,000**	

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Exhibit A. Ferguson, Inc. Pricing and Equipment-Final Deployment Detail (Phase II)

1	FULL DEPLOYMENT: AMI INFRASTRUCTURE: Controllers, Collectors, Gateways, Repeaters, base stations, etc.	Quantity	Each	Extended	Notes
1.01	Sensus FlexNet M400 BaseStation	3	$ 20,600	$ 61,800	
1.02	Sensus FlexNet M400 BaseStation				
	Total AMI Infrastructure	**3**		**$ 61,800**	

3	FULL DEPLOYMENT: NEW ELECTRIC METERS	Meter ANSI Form	Quantity	Each	Extended	Notes
3.01	Sensus iConA	Single phase 1S	1	$ 102	$ 102	
3.02	Sensus Stratus	Single phase 2S	8,777	$ 117	$ 1,030,771	
3.03	Sensus iConA	Single phase 3S	1	$ 122	$ 122	
3.04	Sensus iConA	Single phase 4S	1	$ 122	$ 122	
3.05	Sensus iConA	Single phase 5S	1	$ 122	$ 122	
3.06	Sensus iConA	Single Phase Class 320	1	$ 161	$ 161	
3.07		Single phase Demand and TOU adder	1	$ -	$ -	Included, No Adder
3.08	Sensus iConA (Sensus Stratus meter for 2SRD. Available for 1S and 12S)	Single phase under glass service disconnect adder	1	$ 33	$ 33	
3.09	Elster A3 (Demand, Voltage Event, 4 Ch.LP,TOU, PQ)	Polyphase meter 9S	1	$ 258	$ 258	
3.10	Sensus iConA	Polyphase meter 12S Network 120/208	1	$ 94	$ 94	
3.11	Elster A3 (Demand, Voltage Event, 4 Ch.LP,TOU, PQ)	Polyphase meter 12S	175	$ 258	$ 45,112	
3.12	Elster A3 (Demand, Voltage Event, 4 Ch.LP,TOU, PQ)	Polyphase meter 16S	1	$ 258	$ 258	
3.13		Cost Adder for Demand and TOU (for polyphase meters)	1	$ -	$ -	Included, No Adder
3.14	Elster A3 K2 Switch	Cost Adder for Reactive Metering (for polyphase meters)	1	$ 39	$ 39	
3.15	Sensus iConA Zigbee adder	Cost Adder for Zigbee Module (All Meters)	1	$ 33	$ 33	
3.16		Cellular communications modules (as required by your design)	1	$ -	$ -	No Cellular Communications Required
		Total Electric Meters	**8,961**		**$ 1,077,228**	

4	FULL DEPLOYMENT: NEW ELECTRIC MODULES (If your AMI meter includes the module, please state as such, quote the meter/module combo in Section 3, and leave this section blank)	Meter ANSI Form	Quantity	Each	Extended
4.01		Single phase 1S	1	$ -	$ -
4.02		Single phase 2S	8,777	$ -	$ -
4.03		Single phase 3S	1	$ -	$ -
4.04		Single phase 4S	1	$ -	$ -
4.05		Single phase 5S	1	$ -	$ -
4.06		Single phase Cl 320	1	$ -	$ -
4.07		Polyphase meter 9S	1	$ -	$ -
4.08		Polyphase meter 12S	175	$ -	$ -
4.09		Polyphase meter 16S	1	$ -	$ -

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| | Total Electric Modules | 8,959 | | $ | - |

5 — FULL DEPLOYMENT: GAS MODULES

	GAS METER	Quantity	Each Including Mounting Kit		Extended	
5.01	Model 100GM, 200GM Indexes	7,220	$	94	$	678,752
5.02	Model 300GM Indexes	268	$	212	$	56,690
5.03			$	-	$	-
	Total Gas Modules	**7,488**			**$**	**735,442**

6 — FULL DEPLOYMENT: WATER MODULES

	WATER METER	Quantity	Each Including Mounting Kit		Extended	
6.01	520M Single Port Radio Residential Water	6,103	$	92	$	563,368
6.02	520M Single Port Radio C&I Water	907	$	92	$	83,725
6.03			$	-	$	-
	Total Water Modules	**7,010**			**$**	**647,093**

7 — FULL DEPLOYMENT: INSTALLATION, PROJECT MANAGEMENT - AMI NETWORK INFRASTRUCTURE (excluding Description

		Quantity	Each		Extended	
7.01	Installation of collectors, repeaters, base station equipment or other AMI transport equipment for Full Deployment	3	$	21,739	$	65,217
7.02	Project Management		$	-	$	-
7.06	Business Process Workshops (optional) (5 day onsite workshop)		$	21,739	$	-
7.04	Other costs as defined by Vendor		$	-	$	-
7.05	Other costs as defined by Vendor		$	-	$	-
	Total Installation and Project Management	**3**			**$**	**65,217**

8 — FULL DEPLOYMENT: RECOMMENDED SPARE PARTS

		Quantity	Each		Extended	
8.01	Spare parts		$	-	$	-
8.02	Spare parts		$	-	$	-
8.03	Spare parts		$	-	$	-
	Total Spare Parts	**0**			**$**	**-**

9 — FULL DEPLOYMENT: TEST EQUIPMENT, TOOLS, SHIPPING, MISC.

		Description	Quantity	Each		Extended	
9.01	Command Link	Test equipment, tools, and software that are necessary for the deployment of the AMI system	1	$	452	$	452
9.02	Trimble HH 900LE	Test equipment, tools, and software that are necessary for the deployment of the AMI system	1	$	4,358	$	4,358
9.03	USB Microtransciever	Test equipment, tools, and software that are necessary for the deployment of the AMI system	1	$	353	$	353
9.04	AMI System Freight Costs (Assumed to be included at no charge. If Supplier intends to bid with a freight charge, please include here.)	Freight for 100% of the system components including but not limited to: Master System, software, documentation, electric meters, electric meter modules, spare parts, servers, hardware, etc.	1	$	-	$	-

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9.05	Licensed Spectrum one-time cost (if applicable)			$ -
	Upfront cost to procure licensed frequency for the wireless AMI system (if applicable). **For solutions that used licensed frequencies, if no price is entered, it is implied that all costs for licensed frequency licensing are included in the AMI package and will be paid for in full by the chosen AMI Vendor at the time of system installation.**		$ -	
	Total Test Equipment, Tools, and Shipping			**$ 5,163**

10	**FULL DEPLOYMENT REQUIRED TURNKEY METER/MODULE INSTALLATION**	**Description** (please list what is included in installation package and name subcontractor(s) as appropriate).	**Quantity**	**Each**	**Extended**
10.01	Installation of all AMI single-phase meters and modules		8,782	$ 49.33	$ 433,216
10.02	Installation of all residential gas modules	Installation package to include: as-found meter accuracy test, transfer of meter data to utility's billing system, GPS at meter location, digital photograph of meter reading, thermal imaging scan of meter socket, meter socket replacement, and storage and disposal of old meters.	7,220	$ 80.00	$ 577,600
10.03	Installation of all commercial gas modules		268	$ 73.33	$ 19,652
10.04	Installation of all residential water modules		6,103	$ 53.33	$ 325,473
10.05	Installation of all commercial water modules		907	$ 60.00	$ 16,080
	Total REQUIRED Turnkey Electric Installation		**16,270**		**$ 1,372,021**

		Total:	**$**	**3,963,965**

OPTIONS

12	**OPTIONAL EQUIPMENT** (cost per unit, depending on your product offering)	**Quantity**	**Each**	**Extended**
12.01	Retrofit L+G AX Focus 2S Module	1	$ -	$ -
12.02	Single phase Wi-Fi Adder	1	$ -	$ -
12.03	Single phase Bluetooth Adder	1	$ -	$ -
12.04	Single phase Other HAN (Home Area Network) Communications Adder	1	$ -	$ -
12.05	Load Management Device	1	$ -	$ -
12.06	Other costs as defined by Vendor	1	$ -	$ -
12.07	Other costs as defined by Vendor	1	$ -	$ -
12.08	Other costs as defined by Vendor	1	$ -	$ -
	Total Optional Equipment	**8**		**$ -**

15	**OPTIONAL COST ADDERS FOR INCREASED COVERAGE** Supplier must quote as part of this bid response optional, not-to-exceed add-on costs to extend coverage as indicated on the line items below.	**Quantity**	**Each**	**Extended**
15.01	Optional Not To Exceed Cost Adder for 99.9% electric meter coverage guarantee.	1	$ 44,000.00	$ 44,000

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Total Optional Equipment	1		$	44,000	

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Exhibit B. Responsibility Matrix

ATTACHMENT A

The Incorporated County of Los Alamos, RFP NO: 17-32, RFP Name: AMI Attachment VII: Responsibility Matrix

This table shows the division of responsibilities between Los Alamos County Department of Public Utilities - and the selected Supplier. For all tasks, it shall be assumed that the responsible party will lead, while the other party will assist or support. In the table, "Supplier" refers to the selected vendor. Please respond "yes" or "no" in the appropriate space below depending on whether Supplier's quoted offering is in compliance with the responsibilities as listed. Please provide any clarifications or explanations in the "Supplier Comments" column where

#	Description	Supplier Responsibility	Los Alamos	Comply Yes	Comply No	Supplier Comments
		DO NOT EDIT THESE COLUMNS		RESPOND IN THESE COLUMNS		
1	Configure, install, and test the AMI hardware and software (the "Master System") and deliver the combined hardware and software to the Purchaser's office.	X		Yes		
2	Provide meters, modules, and metering transport equipment for deployment. Ship equipment to Purchaser's designated locations.	X		Yes		
3	Train Purchaser's personnel and Contractors on how to properly install the equipment and use and navigate the Master System for all defined software functionality.	X		Yes		
4	Install all Electric Residential Meters and Gas Modules.	X		Yes		
5	Install meters/modules and/or retrofit designated three-phase meters with Supplier's provided AMI transponders in the field.		X	Yes		
6	Install meters/modules and/or retrofit designated water services with Supplier's provided AMI transponders in the field.		X	Yes		
7	Provide training and education to Purchaser personnel or designated representatives, for installation of all hardware and operation of Supplier's System.	X		Yes		
8	Provide ongoing project and technical support as mutually agreed in future discussions and as set forth in Contract documents.	X		Yes		
9	Complete System Acceptance Testing (SAT) at Purchaser's site.	X	X	Yes		
10	Ensure that all defined AMI system functionality performs according to compliance statements provided in Supplier's RFP response, including submitted product brochures, requirements documents, critical questions and other information presented by the Supplier RFP, and that said functionality is tested as part of the SAT.	X		Yes		
11	Install collectors, repeaters, base station equipment or other AMI transport equipment for Phase I (Initial Deployment Area) (*Please clarify per equipment type in "Supplier Comments" Column I.*)	X	X	Yes		AMI collector will be installed per location on propagation study, each Sensus M400 Basestation to collect meter data from Smartpoints installed by supplier on Gas, Water and Electric meters identified in Phase I of the RFP.
12	Complete detailed wireless collector system design and install Supplier-provided AMI transport equipment.	X		Yes		
13	Meet Coverage Commitment for five (5) years from the date that 95% of electric AMI meters are installed and have associated with the AMI master system.	X		Yes		The system is designed for 99.5% coverage for the meter locations supplied by the owner for the Propagation Study.
14	For the tower based AMI vendors, provide towers or poles and install cabling and install antennas to the tower/pole structure.		X	Yes		

This table shows the division of responsibilities between Los Alamos County Department of Public Utilities - and the selected Supplier. For all tasks, it shall be assumed that the responsible party will lead, while the other party will assist or support. In the table, "Supplier" refers to the selected vendor. Please respond "yes" or "no" in the appropriate space below depending on whether Supplier's quoted offering is in compliance with the responsibilities as listed. Please provide any clarifications or explanations in the "Supplier Comments" column where

#	DO NOT EDIT THESE COLUMNS			RESPOND IN THESE COLUMNS		
	Description	Supplier Responsibility	Los Alamos	Comply		Supplier Comments
				Yes	No	
15	Transport (and cost of transport) for any AMI collector, antenna, cabinets, or other collector/base station equipment to the field location where the installation will be completed.	X		Yes		
16	Connect Master System in Purchaser's main office to the third-party communications system.		X	Yes		
17	Provision an adequate communication circuit between each AMI take-out point containing Supplier-provided equipment to Purchaser's data center where Supplier-provided Master System is located.		X	Yes		
18	Provide support to the Purchaser upon request as the AMI Master System is integrated to the Purchaser's software systems as listed in the RFP (e.g. CIS, OMS, MDMS) including support for MultiSpeak Use Cases and Methods lists in the RFP and attachments as well as direct ODBC connectivity to Supplier's databases as required.	X		Yes		
19	Provide software integration services between the AMI and other systems. Please comment on assumed vendor responsibilities for integration to systems such as an OMS, CIS, etc.	X	X	Yes		
20	Support MultiSpeak methods and web service communications as defined in the RFP.	X		Yes		

ATTACHMENT A

Exhibit C. System Functionality Requirements and Specifications

ATTACHMENT A

The Incorporated County of Los Alamos, RFP NO: 17-32, RFP Name: AMI

Attachment V: AMI Requirements

SUPPLIER RESPONSE INSTRUCTIONS: This document contains a list of functional and technical specifications or requirements. Please respond "yes" or "no" in the appropriate space below depending on whether your system is in compliance with the specification. In all cases, provide a brief commentary describing how your system complies or does not comply. If your system is in partial compliance, please provide an explanation and, if appropriate, offer an alternative.

Note to bidders: Your responses to these Requirements are binding and take precedence over any and all bid and contracting documents. The selected Supplier will be in breach of contract if Supplier's response indicates compliance but the System is determined to not be in compliance during System Acceptance Testing.

AMI Requirements		Supplier Response Fields					
No.	Product Attributes	Comply	Partially Comply/Exception	Do Not Comply	Included in Base Bid	Option with Additional Cost	Vendor Comments
Mandatory Requirements							
1	The bidder must provide (or contract) installation of all Electric Residential Meters and Gas Modules. Water modules and Electric Commercial sites will be performed by Los Alamos.	Yes			Yes		
2	All meter and module installers must obtain and hold an EL-1 license in the state of New Mexico.	Yes					
AMI Master System and Integration							
3	The AMI master system must support all MultiSpeak 3.x/4.x AMI use cases for integrations with other enterprise applications as listed in Appendix VII. Note, *if any additional costs are required to comply with all MultiSpeak 3.x/4.0 AMI use cases then they must be quoted in the Pricing section.*		Yes			Yes	The FlexNet AMI master system supports MultiSpeak 3.0 and 4.1 Application Programming Interfaces (APIs). MultiSpeak web services are available for meter reading, customer billing and outage management, meter management, and meter lifecycle functions as noted in Attachment VII. Sensus has developed interfaces that meet more than 90% of our customer's API needs. Should additional API calls be needed, Sensus will prioritize development to meet integration needs. Sensus has noted all supported API calls (using MultiSpeak 3.0 or 4.1). These items have been priced as part of the integration portion in Attachment VI - Pricing schedule. All other API calls would require a scoping exercise to determine the scope of work and additional pricing.
4	The AMI master system must support a flat file upload of metering data into the CIS, MDMS, etc.	Yes			Yes		
5	The AMI master database is preferred to be an SQL relational database system.	Yes			Yes		
6	The system must have current production integrations with the Purchaser's Planned ERP System - Tyler Munis. Please list locations where your AMI system is in production with a Tyler Munis ERP. Starting July 2018, Tyler Munis will be the system of record and is the preferred up front integration. If there are no current existing integrations, one is expected to be in place and working before the July 2018 date.	Yes			Yes		Sensus recommends using standards based interfaces provided by the RNI for integrating with Los Almos's back-end systems including Tyler Munis ERP. Sensus RNI supports Multispeak v3.0 and v4.1 standard and a flat-file based VFLEX for integration with the Sensus Analytics. The latest available Sensus RNI release support an exhaustive list of MultiSpeak interfaces for Meter Life-cycle, On-Demand Read, Remote Connect/Disconnect for integration with the ERP system. The ERP system being the System of Record will get the service Add/Remove/Exchange updates and in turn propagate these updates to RNI and Sensus Analytics via the above mentioned interfaces. The Sensus Professional Services team is well versed in the integration of FlexNet with other third-party platforms and systems and they will work with Los Alamos Business stakeholders to understand the requirements for migration of CIS and implement the appropriate interfaces to get these systems working together.

ATTACHMENT A

AMI Requirements / Supplier Response Fields

#	AMI Requirements	Supplier Response	Supplier Response	Supplier Response Fields (Comments)
7	Until the full go-live date to the Tyler Munis ERP, the system must have current production integrations with the Purchaser's Customer Information and Billing System - Cayenta (V7.6). Please list all other current CIS integrations as well.	Yes	Yes	To date, all integrations to Harris' Cayenta have been in conjunction with either Harris MeterSense MDMS, or Sensus Logic MDMS. Logic MDMS and AMI Master System pairing is fully functional. Customers who use the Logic MDMS, are provided with many additional system capabilities. The Logic solution is an additional cost beyond the AMI Master System. The following customers currently use Harris Cayenta CIS, and we have integrated the AMI Master System and MDMS platforms with this system for the following customers: * Bryan Texas Utilities * Jackson, MS * Mid-West Energy Sensus FlexNet has been integrated with many types of solutions, including but not limited to the following CIS vendors: * NISC * SEDC * SmartGrid CIS * Allete CIS * Harris Utilities * eMeter * *Oracle * Siemens
8	The AMI master system base bid shall be a hosted-based solution. Please indicate in the comments if a hosted-based option is presently available, and if so, please provide a cost for a hosted-based AMI Master. Also provide optional pricing for premised based installations. See Pricing Attachment.	Yes	Yes	
ATTACHMENT A				
9	What is the default recording (capturing of intervals) and reporting (frequency of sending data) intervals use in the residential and commercial end points. This includes all electric, water, and gas meters. Also state the minimum recording and reporting intervals your proposed solution is capable of.	Yes	Yes	For water and gas meters, the default is hourly meter readings (capturing of intervals), with transmissions to the head end system every four hours. The 20-year battery warranty is based on this default setting for water and gas SmartPoint communication modules. For water and gas meters, the minimum recording interval is 15 minutes, with hourly transmissions. There is no default setting for electric meters. The load profile data interval length and transmission frequency specified by Los Alamos for electric meters is programmed into the meter at the factory. Typically, electric meters are configured for hourly reads with transmissions of data every four hours. For electric meters, the minimum recording interval is one minute with 5 minute transmissions. Note: The propagation study and network design is based on the data collection and transmission intervals required by Los Alamos. This must be considered for the final network design needed to meet Los Alamos network performance requirements.
10	The AMI master system must have the flexibility to provide electric/water/gas meter readings over both the proprietary AMI system and other AMI network technologies/options for remote areas. Please state all other AMI network options currently available and on the roadmap.		Do not Comply	See Appendix A-1
11	Supplier must state the locations of any meters that are assumed to be accessed with other AMI backhaul solutions (Cellular, Wi-Fi, Etc.)	Yes		The FlexNet Solution does not rely on any cellular or public-based networks for communication.

Supplier Response Fields

AMI Requirements		Supplier Response Fields
		The FlexNet AMI modules do not use cellular communications. To address hard-to-reach meters, Sensus uses mPass mode to allow connected meters or FlexNet Remote Portals to communicate with these hard-to-reach meters. In addition to the network tools used in past North American FlexNet projects, Sensus is introducing additional tools to assist with communications in extremely challenging locations (e.g., geographically hard-to-reach locations, sub-basements, and very deep subterranean locations), specifically the R100. For isolated pockets of meters—urban or rural—the FlexNet R100 is a low-cost, miniaturized, full-functioned, multichannel RF data collector that can be deployed in these areas where a full FlexNet Base Station (AMI collector) will not physically fit or is overdesigned for the application (i.e., too few meters to justify cost). The R100 will support all required Los Alamos County business functions, including electric and gas metering, near real-time metering (5-minute data collection with 15-minute data transmission), and distribution automation. Additionally, its low cost and small form factor means that it can easily be installed inside buildings, tunnels, and in subterranean locations to read only a few meters. Data collected by
12	For any meter or repeater locations assumed to be served with cellular, the air-time must be quoted as part of this bid in the form of a not-to-exceed price per location for a ten-year period.	Yes
		through standardized interfaces such as CMEP and MultiSpeak. The FlexNet AMI Master System supports a variety of methods for integrating with third-party applications: >Flat file exports of CMEP, HHF, and MVRS to feed MDM, CIS, and OMS systems with registry reads, interval data, and alarm events. > MultiSpeak web services for meter reading, customer billing, outage management, meter management, and meter lifecycle functions. > The MultiSpeak web service includes the MDMClient meter reading web service. It is capable of transmitting real-time readings to the MDM as the AMI Master System receives them and ensures they are not duplicates. This real-time integration is a huge advancement over daily flat file exchanges used by many utilities today. > CIM interfaces for on-demand reading, power status verification, interval data delivery (auto-push), meter event delivery (auto-push), and remote connect/disconnect. The Sensus Professional Services team is well versed in the integration of FlexNet with other third-party platforms and systems. Sensus has participated in more than 500 FlexNet deployments over the past seven years, and has interfaced the FlexNet system with a wide variety of MDM systems during that time. Sensus leverages standards-based APIs, including the
13	The AMI system must integrate with an MDMS (TBD), Web Portal (MyMeter and Smart Utility Systems (SUS)), and OMS (Milsoft). Please state other integration capabilities possible not listed here as well.	Yes

ATTACHMENT A

AMI Master System Reporting/Inquiry

AMI Requirements		Supplier Response Fields
14	If a communications error or outage occurs between the AMI collector and the AMI master, the master must be able to report the location of AMI collector and also have a field to locate the latitude/longitude of all collectors.	Yes
		Locations of all AMI Collectors are recorded in the AMI Master Station.
15	An AMI collector must have a field to insert a fixed IP address for each collector.	Yes
16	The AMI System MUST currently support Electric, Water, and Gas meters/modules. All meters and modules must be currently in production. Please state the total quantity of each type at all current deployments for each electric, water, and gas units.	Yes
		Sensus® provides utilities with the essential services of metering and measurement of electricity, gas, water, lighting control, Distribution Automation, and Demand Response under a single network infrastructure. FlexNet™ solutions are purposefully designed and built to meet the needs of small and large utilities and adapt to changing business drivers as Advanced Metering Infrastructure (AMI) requirements evolve over time. Sensus has approximately 20 active projects with more than 150,000 total endpoints and 7 active projects with over 750,000 total endpoints. The total quantities of each type of meter/module deployed for electric, water, and gas follows: >Electric: approximately 12.6 Million >Water: approximately 7.2 Million >Gas: approximately 2 Million. Sensus does not track the number of endpoints a utility installs per day, but we are currently deploying FlexNet at 115 separate utilities. Due to NDA requirements with these utilities, we are not authorized to provide a full listing of all these utility names

Meter Reading Functionality

	AMI Requirements		Supplier Response Fields	
17	The system should be able to interface with at least two solid state meter manufacturers for each meter form factor. Please list the meter used in the base pricing *as well as all other meter manufacturers supported*.	Yes	Ferguson/Sensus is quoting the Sensus Stratus meter for Form 2S (class 200) residential applications. For other single phase and network forms, Ferguson/Sensus is quoting the Aclara I-210+c meter. The I-210+c meter is available in forms 1S, 2S, 3S, 4S, 12S, and 25S. Sensus' iConA meter is also available in the same Forms as the I-210+c. For polyphase service, Ferguson/Sensus is quoting Honeywell's A3 ALPHA meter for all meter forms. The Aclara kV2c meter is also supported. Available forms are 1S, 2S, 3S, 4S, 9S (8S, 10S), 12S (13S), 16S (14S, 15S), 16S (14S, 15S), 25S, 35S (5S, 45S), and 36S (6S, 46S)	Yes
18	When the system is set up to bring back metering data once per hour, the system must be able to capture and report the 15-minute interval for each of the four 15-minute intervals for each hourly read.	Yes	The read interval and transmission interval can be programmed independently. Interval data with one hour transmissions is a valid and common configuration.	Yes
19	The System should record Net Metering information in at least four (4) definable time periods assuming the proposed meter is used.	Yes	Net metering is supported in each TOU tier for all quoted meters.	Yes
20	The System should provide the capability for remote demand reset. This should be able to be done individually, in groups, or system-wide.	Yes	The FlexNet Head End System is capable of initiating demand reset actions to all FlexNet-enabled meters, including the Sensus Stratus and iConA, Aclara I-210+c, Aclara kV2c EPS, and Elster ALPHA A3 meters. Demand resets can be initiated via the head end system user interface and MultiSpeak. The MultiSpeak interface enables the MDM or CIS system to manage the schedule. The demand reset action can reset individual meters or a list of meters.	Yes
21	Meter module maintains existing firmware image until firmware updated passes Cyclical Redundancy Check or other test of successful update.	Yes	The FlexNet AMI Master System supports remote upgrades for an individual meter or groups of FlexNet-enabled meters. For firmware upgrades, Sensus uses a total replacement approach. Updates to the AMI modules are performed over a period of time when the code is transmitted to the AMI modules via packets. As each packet arrives, the Cyclic Redundancy Check (CRC) is validated before being stored in memory. Once validated, the packet is loaded into a secondary bank of memory. The FlexNet AMI Master System queries the module to determine whether all required packets have arrived. If packets are missing, they are retransmitted. Once all of the packets are transmitted, the AMI module verifies the 32-bit CRC of the entire firmware or software upgrade to ensure the integrity of the new code. After the code is verified, the AMI Master System issues a command with the Cipher Block Chaining Message Authentication Code (CBC-MAC) signature to the AMI module to execute the new firmware update	Yes

ATTACHMENT A

AMI Requirements	Supplier Response Fields
	The Sensus Stratus meter contains two temperature sensors. One is located at the base of the meter on the metrology board, and the other is on the FlexNet module board at the top of the meter. Having two temperature sensors allows the Sensus meter to make smarter temperature decisions. Meters having only one sensor at the top of the meter can be affected by the sun's rays to generate false readings. The meter offers the following features:
	➤ High Temperature Alarm: sent when the meter reaches a programmable temperature. The alarm is sent 6 times, 5 seconds apart to ensure the utility is notified.
22 The AMI module shall have a built-in temperature sensor that automatically reports meter/module temperatures above a user-configurable threshold.	➤ For supporting fast events, the meter monitors the rate of change of the metrology temperature and the difference between the two sensors If the rate is high enough, and the metrology temperature is much higher than the FlexNet temperature, the thresholds are reduced. This causes the meter to react more quickly to rapid changes in temperature.
	➤ Temperature Auto Open: for meters equipped with a service switch, the meter can be set to automatically open the service switch when a temperature threshold is achieved. The meter will send alarms for this condition alerting the utility that the meter opened automatically due to high temperatures. This is an optional feature that can be enabled or disabled.
	All third-party meters (Elster A3 ALPHA, Aclara kV2c EPS, and Aclara I-210+c) **Yes** / **Yes**
Electric Disconnect & Reconnect	
The proposed System should be capable of operating an electric meter with an underglass disconnect. Please indicate what meters in your bid come with an underglass disconnect.	The system can operate meters with an under-the-glass-disconnect switch. The Sensus iConA and GE I210+c residential meters have optional 200-amp under-glass disconnect switches. **Yes**
The proposed System should have a customer arming feature for use after a remote reconnect.	The Stratus and iConA meters provide an optional arm for connect feature. The SmartPoint communication module receives a command from a FlexNet Base Station to arm for connect, but not close the disconnect switch. The customer must use a standard infrared remote control to close the switch. **Yes** / **Yes** The Aclara I-210+c meter provides a remote disconnect option; however arm for customer reconnect is not supported.
Demand Response and Home Automation	
25 The AMI master system must be able to communicate to a Wi-Fi based load management device over a broadband based connection.	The Sensus AMI Master System communicates with the Load Control Modules via the FlexNet Protocol. We have many customer today with fully deployed Load Control Solutions we are happy to discuss in more detail. **Do Not Comply**
Distribution Automation	
26 The AMI system should be able to communicate with electric field equipment, such as: a. Fault indicators b. Downline IEDs	Sensus' DA solution is currently used by more than 200 electric utilities and was first implemented over 16 years ago. The Remote Telemetry Module (RTM II™ and RTM II+) mounts inside a DA device cabinet and is less than 300 cubic inches. The RTM II provides a dual RS232 serial interface and the RTM II+ has an Ethernet, an RS232, and an RS485 serial interface. Required source voltage is 12-24 VDC, 70 mA typical, and 0.6 A max (< 0.5 sec.) for devices installed inside DA device cabinets.The RTM II and RTM II+ modules are also available as 120 VAC powered modules mounted in a NEMA 3R box. Sensus has other optional self-enclosed units that are NEMA 3R rated and can be installed next to DA devices. Please refer to the following Appendices to view technical specifications for these devices. • XX_Sensus NaviComm.pdf • XX_Sensus T866 MicroRTU.pdf • XX_Sensus TC032 MicroRTU.pdf Sensus Distribution Automation (DA) delivers cost-effective two-way wireless FlexNet communications and control solutions for a wide range of DA, enhancing power delivery, reliability, and efficiency applications, including the following: • Recloser controller communications to enable better voltage optimization • Capacitor bank controllers to improve distribution grid efficiency. • Automated **Yes** / **Yes**

ATTACHMENT A

Supplier Response Fields

#	AMI Requirements	Response	Supplier Response Fields	Response
AMI Requirements				
27	DA interface modules with RS-232 serial communication ports are required.	Yes	The Sensus RTM II+ smart communication gateway provides an RS-232 interface that can support concurrent asynchronous message control needed for remote configuration tool access	Yes
28	DA interface modules with Ethernet communication ports are required.	Yes	The Sensus RTM II+ smart communication gateway provides an Ethernet port for direct DNP 3.0 communications to the customer's distribution devices	Yes
29	If a proprietary AMI communication protocol, it must be converted to DNP3 by the DA interface module.	Yes	Sensus' Distribution Automation solution including AutomationControl software, FlexNet infrastructure, and DA endpoints all communicate using DNP 3.0 protocol	Yes
AMI System Security				
30	The proposed AMI System should fully comply with the latest version of the UCAIug UtiliSec AMI-SEC AMI System Security Specification. This specification can be found here: **http://osgug.ucaiug.org/utilisec/amisec/default.aspx**	Yes	Sensus has mapped each of the FlexNet components to the AMI-SEC security domains according to the AMI Security Profile version 2.0. Sensus complies with each of the document requirements	Yes
31	Any portion of the AMI system that uses wireless as a means of communication between AMI system components must use encryption. This should include all portions of the AMI system including AMI Communication Backhaul System, Home Area Network (HAN), and Neighborhood Area Network (NAN). The encryption standard should be AES-128 or greater.	Yes	Information confidentiality is a key concern for Sensus and our customers. Sensus protects information from end to end through the system through encrypted communications across the FlexNet network. This encryption provides the confidentiality of the bi-directional communications between the endpoints and AMI Master System. Communications are encrypted at the endpoint/AMI Master System using the AES algorithm with a 256 bit key. The communications remain encrypted across the network to the AMI Master System/endpoint, where it is decrypted, thus protecting information across the IP and RF networks. In addition, to protect system level communications (SNMP, Syslog) from the base station, Sensus provides an SSL VPN component to encrypt unsecured communications from the base station to the AMI Master System. This allows the transmission of unsecure protocols across the public IP backhaul network. To protect the confidentiality of communications for user and system interfaces with the AMI Master System, Sensus has implemented SSL encryption. This secures confidential interfaces for access to the AMI Master System for users and system APIs.	Yes
32	During deployment of the AMI system, AMI Collectors should be programmed with non-routable IP addresses according to the Purchaser's private corporate LAN-WAN IP addressing scheme.	Yes	Sensus' AMI Collectors support both private and public IP Address routing.	Yes
33	The System must have the capability to comply with current NIST standards for information security, as delineated in NISTIR 7628.	Yes	See Appendix A-3	Yes
34	The vendor must be able to demonstrate the use of secure software development practices in compliance with NIST SP800-64.	Yes	In order to implement our strategy of threat assessment and risk mitigation, Sensus has developed a Security Development Lifecycle (SDL) program based on NIST SP800-64 to ensure that our strategy is implemented at every step of our design, development, testing, and implementation. Through this program, the Sensus security team drives the security strategy from the beginning. During the design phase of product development, security requirements are created based on the threat, risk assessment, and mitigation model described above. These security requirements are addressed through the development process using a number of security controls as dictated by the security requirement (e.g. confidentiality of communication using strong, standards-based encryption mechanisms). Once the development phase is complete, the security requirement is passed to the QA team. Sensus maintains a dedicated security test team to ensure the security requirement is met and the functionality of the system is not impacted. In addition, this team also provides a checkpoint to ensure the requirement addresses the original risk identified by the security team. Finally, through the implementation team, the product is deployed in a secure manner with the security requirements being met	Yes
35	The system must be able to accommodate firewall traversal to support being located on a different firewall interface from other integrated systems to support the recommended architecture of NIST SP800-82.	Yes	Sensus recommends the use of commercial firewalls and DMZ networks to segment the components of the AMI Master System to provide separation and protection of critical resources	Yes
36	The System shall automatically terminate orphaned sessions and not support session resume (for non-local network connections).	Yes	All Sensus components support the ability to time out sessions and force authentication on these sessions or other orphaned sessions	Yes

ATTACHMENT A

AMI Requirements			Supplier Response Fields	
ATTACHMENT A 37	The system must be able to support NIST's Roles Based Access Control (RBAC) model for application accounts.	Yes	Yes	Sensus provides strong authentication mechanisms in the AMI Master System through a local LDAP authentication store included in the AMI Master System software. Another option is the ability to integrate into an organization's existing LDAP/Active Directory authentication store. This provides a robust authentication solution for a broad range of deployment options. The AMI Master System also provides role-based access to ensure separation of duty and restriction of access to critical functions. This provision allows a granular level of access control for the various roles required by complex organizations. The system has a default configuration of a variety of pre-defined roles with various levels of permission (Administrator, Read-Write, Read-Only, etc.) and can be further customized by the customer.
38	The system must have an account permissions architecture to support Sarbanes-Oxley and PCI requirements.	Yes	Yes	Sensus systems do not contain any data that would apply to SOX or PCI. We provide compliance with NERC CIP, AMI-SEC, NIST 800-53, and other utility industry-specific standards compliance. These standards include best practices such as firewalls, IDS/IPS, authentication, authorization, and encryption used to protect sensitive data
39	The Supplier must describe any additional security-related functionality that is included and/or recommended with their proposed solution.	Yes	Yes	See Appendix A-4

Exhibit D. Sensus Software as a Service/Spectrum and Technical Support Agreement

ATTACHMENT A

EXHIBIT D. SENSUS (SOFTWARE) AGREEMENT

Software as a Service/Spectrum and Technical Support Agreement
("Agreement")
Between
The Incorporated County of Los Alamos
("Customer")
And
Sensus USA Inc.
("Sensus")

IN WITNESS WHEREOF, for and in consideration of the premises and the covenants contained herein, the parties have caused this Software as a Service/Spectrum and Technical Support Agreement ("Agreement") to be executed by their duly authorized representatives as of the day and year written below. The date of the last party to sign below is the "Effective Date."

This Agreement shall commence on the Effective Date and continue for/until: four (4) year ("Initial Term"). At the end of the Initial Term, this Agreement shall automatically renew for up to an additional three (3) terms of one (1) year each (each a "Renewal Term") unless terminated in writing by Customer, pursuant to Chapter 31 §111 of Los Alamos County Code of Ordinance, at least sixty (60) days before the end of the Renewal Term. It is intended that the Agreement be a multiterm contract in accordance with the provisions of Chapter 31 §111 of Los Alamos County Code of Ordinance and shall be construed to comply with that Section. The "Term" shall refer to both the Initial Term and each Renewal Term.

It is understood and agreed by the parties hereto, that Sensus is a supplier of Ferguson, Inc., a Sensus authorized distributor, in the implementation of the advanced metering infrastructure project with the Customer. All fees and costs relating to the Customer's usage rights for Sensus' Software as a Service and Technical Support services are set forth in the agreement between Sensus and Ferguson, Inc.

This Agreement contains two parts. Part (1) is the FCC Notification for Spectrum Manager Lease, to be filed with the FCC by Sensus on behalf of Customer and Part (2) is a Software as a Service /Spectrum and Technical Support Agreement between Sensus and Customer. Together, these two parts create the Agreement.

Sensus USA, Inc.	Incorporated County of Los Alamos
_____ Name/Title	_____ Timothy Glasco, P.E., Utilities Manager
_____ Date	_____ Date Approved as to Form: _____ J. Alvin Leaphart, County Attorney

Contents of this Agreement:
Part 1: Notification for Spectrum Manager Lease
Part 2: Software as a Service/Spectrum
      Exhibit A Software
      Exhibit B Technical Support

ATTACHMENT A

EXHIBIT D. SENSUS (SOFTWARE) AGREEMENT

Part 1: Notification for Spectrum Manager Lease

In order for Sensus to apply to the FCC on the Customer's behalf for a spectrum manager lease, Customer must complete the information below in boxes one (1) through ten (10) and certify via authorized signature. Customer's signature will indicate that Customer authorizes Sensus to file the spectrum manager lease notification on FCC Form 608 with the Customer as spectrum Lessee, and if Customer does not already have one, ownership disclosure information on FCC Form 602.

1.

Customer/Lessee Name:	
Attention To:	**Name of Real Party in Interest**:
Street Address:	**City**:
State: **Zip**:	**Phone**:
Fax:	**Email**:

Is Customer contact information same as above? ☐ Yes ☐ No (If No, complete box 2 below)

2.

Additional Customer/Lessee Contact Information

Company Name:	
Attention To:	
Street Address:	**City**:
State: **Zip**:	**Phone**:
Fax:	**Email**:

3.

Customer/Lessee is a(n) (Select one): ☐ Individual	☐ Unincorporated Association	☐ Trust ☐ Government Entity	☐ Corporation	☐ Limited Liability Company	☐ General Partnership ☐ Limited Partnership	☐ Limited Liability Partnership	☐ Consortium	☐ Other _____

4.

FCC Form 602: FCC File Number of Customer's Form 602 Ownership Information: _____. If Customer has not filed a Form 602, Sensus will file one for Customer. Please complete questions 5, 6, and 7 below if Customer does <u>not</u> have a Form 602 on file. Customer must complete items 8, 9 and 10 irrespective of whether Customer has an ownership report on file.

5.

Customer Tax ID:

6.

Individual Contact For FCC Matters

Please designate one individual (the Director of Public Works or similar person) who is responsible to the FCC for the operation of the FlexNet radio system.	
Name	
Title:	
Email:	Phone:

7.

Ownership Disclosure Information

ATTACHMENT A

EXHIBIT D. SENSUS (SOFTWARE) AGREEMENT

If Customer/Lessee is a government entity, list the names of the Mayor and all Council Members below, as well as verify citizenship and ownership interests in any entity regulated by the FCC. Such ownership must be disclosed where a mayor/council member owns 10% or more, directly or indirectly, or has operating control of any entity subject to FCC regulation. If any answer to Ownership question is Yes, or any answer to Citizenship question is No, provide an attachment with further explanation.

	US Citizen?	Ownership Disclosure?
Mayor:	☐Yes ☐No	☐Yes ☐No
Council Member:	☐Yes ☐No	☐Yes ☐No
Council Member:	☐Yes ☐No	☐Yes ☐No
Council Member:	☐Yes ☐No	☐Yes ☐No
Council Member:	☐Yes ☐No	☐Yes ☐No
Council Member:	☐Yes ☐No	☐Yes ☐No
Council Member:	☐Yes ☐No	☐Yes ☐No
Council Member:	☐Yes ☐No	☐Yes ☐No
Council Member:	☐Yes ☐No	☐Yes ☐No
Council Member:	☐Yes ☐No	☐Yes ☐No

8.

Alien Ownership Questions (if the answer is Yes, provide an attachment explaining the circumstances)

1) Is the Customer/Lessee a foreign government or the representative of any foreign government?	☐Yes ☐No

9.

Basic Qualification Information

1) Has the Customer or any party to this application had any FCC station authorization, license, or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license or construction permit denied by the Commission?	☐Yes ☐No
2) Has the Customer or any party to this filing, or any party directly or indirectly controlling the Customer or any party to this filing ever been convicted of a felony by any state or federal court?	☐Yes ☐No
3) Has any court finally adjudged the Customer or any party directly or indirectly controlling the Customer guilty of unlawfully monopolizing or attempting to unlawfully monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition?	☐Yes ☐No

10.

Customer/Lessee Certification Statements

1) The Customer/Lessee agrees that the Lease is not a sale or transfer of the license itself.	☐Yes
2) The Customer/Lessee acknowledges that it is required to comply with the Commission's Rules and Regulations and other applicable law at all times, and if the Customer/Lessee fails to so comply, the Lease may be revoked, cancelled, or terminated by either the Licensee or the Commission.	☐Yes
3) The Customer/Lessee certifies that neither it nor any other party to the Application/Notification is subject to a denial of Federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C § 862, because of a	☐Yes

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conviction for possession or distribution of a controlled substance (*See* Section 1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of "party to the application" as used in this certification.)	
4) The Customer/Lessee hereby accepts Commission oversight and enforcement consistent with the license and lease authorization. The Lessee acknowledges that it must cooperate fully with any investigation or inquiry conducted either by the Commission or the Licensee, allow the Commission or the Licensee to conduct on-site inspections of transmission facilities, and suspend operations at the direction of the Commission or the Licensee and to the extent that such suspension of operation would be consistent with applicable Commission policies.	☐Yes
5) The Customer/Lessee acknowledges that in the event an authorization held by a Licensee that has associated with it a spectrum leasing arrangement that is the subject of this filing is revoked, cancelled, terminated, or otherwise ceases to be in effect, the Customer/Lessee will have no continuing authority to use the leased spectrum and will be required to terminate its operations no later than the date on which the Licensee ceases to have any authority to operate under the license, unless otherwise authorized by the Commission.	☐Yes
6) The Customer/Lessee agrees the Lease shall not be assigned to any entity that is not eligible or qualified to enter into a spectrum leasing arrangement under the Commission's Rules and Regulations.	☐Yes
7)The Customer/Lessee waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by spectrum lease or otherwise.	☐Yes
8) The Customer/Lessee certifies that it is not in default on any payment for Commission licenses and that it is not delinquent on any non-tax debt owed to any federal agency.	☐Yes

The Customer/Lessee certifies that all of its statements made in this Application/Notification and in the schedules, exhibits, attachments, or documents incorporated by reference are material, are part of this Application/Notification, and are true, complete, correct, and made in good faith. The Customer/Lessee shall notify Sensus in writing in the event any information supplied on this form changes.

Incorporated County of Los Alamos			
By:		Title:	
Name:		Date:	
FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.			
WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18, Section 1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, Section 312(a)(1)) AND/OR FORFEITURE (U.S. Code Title 47, Section 503).			

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Part 2: Software as a Service/Spectrum

1. **Equipment.**
   A. **Purchase of Equipment.** Customer shall purchase all Field Devices, RF Field Equipment, and other goods (collectively, "Equipment") from Sensus' authorized distributor pursuant to the terms and conditions (including any warranties on such Equipment) agreed by Customer and Sensus' authorized distributor. This Agreement shall not affect any terms and conditions, including any warranty terms, agreed by Customer and Sensus' authorized distributor. If Customer elects to purchase any equipment or services directly from Sensus, or if Customer pays any fees or other costs to Sensus, then Sensus' Terms of Sale shall apply. The "Terms of Sale" are available at: http://na.sensus.com/TC/TermsConditions.pdf, or 1-800-METER-IT.
   B. **First Article Testing.** Where applicable, prior to manufacture of full order of FlexNet electric meters and/or modules, Sensus shall manufacture and deliver four (4) samples, or other Customer-designated quantity not to exceed twelve (12), (the "First Articles") of each electric meter and/or module ordered to Customer to ensure that the meter and/or module meets the Customer's Requirements Documentation. Following Customer acceptance of the First Articles in accordance with Sensus' first article policy, Sensus will commence manufacture of the applicable meters and/or modules. As used herein, Requirements Documentation shall mean the meter order packet, nameplate definition and approval, manufacturing data file, specific metrology configuration, specific FlexNet configuration, and labeling information. This provision shall apply whether the Customer orders meters directly from Sensus or Sensus' authorized distributor.
   C. THERE ARE NO WARRANTIES IN THIS AGREEMENT, EXPRESS OR IMPLIED. SENSUS EXPRESSLY DISCLAIMS ANY AND ALL REPRESENTATIONS, WARRANTIES AND/OR CONDITIONS, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE, REGARDING ANY MATTER IN CONNECTION WITH THIS AGREEMENT, INCLUDING WITHOUT LIMITATION, WARRANTIES AS TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, NON-INFRINGEMENT AND TITLE.
2. **Services.**
   A. **Installation of Equipment.** Installation services will be as agreed between the Customer and Sensus' authorized distributor. Sensus will not provide installation services pursuant to this Agreement.
   B. **Software Implementation.** Sensus shall install and configure the Software on the Server Hardware.
   C. **IT Systems Integration Services.** Sensus shall provide systems integration services for the AMI System and meter data management ("MDMS") software described in the Statement of Work between the Customer and Sensus' authorized distributor.
   D. **Technical Support.** Sensus shall provide Customer with Technical Support as set forth in **Exhibit B**.
   E. **Project Management and Training.** Sensus shall provide project management and training related to the deployment and operation of the AMI System as described in the Statement of Work between the Customer and Sensus' authorized distributor.
3. **Software.**
   A. **Software as a Service ("SaaS").** Sensus shall provide Customer with Software as a Service, as defined in **Exhibit A**, only so long as Customer is current in its payments for such services to Sensus' authorized distributor.
   B. **UCITA.** To the maximum extent permitted by law, the Parties agree that the Uniform Computer Information Transaction Act as enacted by any state shall not apply, in whole or in part, to this Agreement.
4. **Spectrum.**
   A. **Definitions in this Section 4.** In this Section 4 only, "Sensus" shall mean Sensus USA Inc. and its wholly owned subsidiary, Sensus Spectrum LLC.
   B. **Spectrum Lease.** Sensus hereby grants to Customer, and Customer accepts, a spectrum manager lease ("Spectrum Lease") over the frequencies of certain FCC license(s) ("FCC License") solely within Customer's Service Territory. (The frequencies of the FCC License within Customer's geographic Service Territory are called the "Leased Spectrum"). Customer shall pay the Ongoing Fees for use of the Leased Spectrum.
   C. **FCC Forms.** At the Federal Communications Commission (FCC), Sensus will; (1) obtain an FCC Registration Number (FRN) for Customer; (2) submit on behalf of Customer the FCC Form 602 Ownership Disclosure Information if Customer has not already done so; and (3) file a FCC Form 608, notification/application for long-term spectrum manager lease. This Lease becomes effective when the FCC accepts the FCC Form 608.
   D. **Lease Application.** In order to complete the FCC lease application, Customer will promptly:
      i. Complete and sign the representations in Part 1 of this Agreement such that Customer demonstrates it qualifies for a spectrum lease under FCC rules. Customer's signature will indicate that Customer authorizes Sensus to; (1) obtain an FRN on behalf of Customer; (2) submit the FCC Form 602 Ownership Disclosure Information on behalf of Customer if Customer has not already done so; and (3) file the spectrum manager lease notification on FCC Form 608 with the Customer as spectrum lessee.
      ii. Give Sensus the coordinates of the boundaries of Customer's Service Territory or, alternatively, approve Sensus' estimation of the same.
      iii. If Customer has not already done so; Customer hereby authorizes Sensus to apply on Customer's behalf and obtain for Customer a Federal Registration Number (FRN, the FCC's unique identifier for each licensee) and shall supply Sensus with Customer's Taxpayer Identification Number (TIN).
      iv. Provide any other information or other cooperation reasonably necessary for the Parties to perform as set forth herein.
   E. **Permitted Use of Spectrum Lease.** Customer may transmit or receive over the Leased Spectrum only in the Service Territory and only using FlexNet equipment manufactured by Sensus and used in accordance with Sensus' specifications. Customer may use the Leased Spectrum only to read and direct meters in support of Customer's primary utility business or any other operation approved by Sensus in writing. Without limiting the foregoing, Customer is prohibited from reselling, subleasing or sublicensing the Leased Spectrum or from transmitting voice communications over the Leased Spectrum. For each piece of RF Field Equipment used by Customer, Customer shall affix a Sensus-supplied label to the exterior of the RF Field Equipment cabinet or other appropriate visible place to indicate that RF operation is conducted under authority of FCC License(s) issued to Sensus.
   F. **Term of Spectrum Lease.** Unless terminated earlier (because, for example, Customer stops using the FlexNet equipment or because this Agreement terminates or expires for any reason), this Spectrum Lease will have the same term as the FCC license. If Customer is operating in compliance with this Agreement and is current on any payments owed to Sensus, when the FCC License renews, the Parties will apply to the FCC to renew this Spectrum Lease.
   G. **Termination of Spectrum Lease.** The Spectrum Lease will terminate: (a) two months after Customer stops transmitting with FlexNet equipment manufactured by Sensus; (b) upon termination, revocation or expiration of the FCC License; (c) upon Customer's breach of this Agreement; or (d) upon termination or expiration of this Agreement for any reason.
   H. **FCC Compliance.** The following FCC requirements apply
      i. Pursuant to 47 CFR 1.9040(a);
         (a) Customer must comply at all times with applicable FCC rules. This Agreement may be revoked by Sensus or the FCC if Customer fails to so comply;
         (b) If the FCC License is terminated, Customer has no continuing right to use the Leased Spectrum unless otherwise authorized by the FCC;
         (c) This Agreement is not an assignment, sale or other transfer of the FCC License;
         (d) This Agreement may not be assigned except upon written consent of Sensus, which consent may be withheld only for cause; and

ATTACHMENT A

EXHIBIT D. SENSUS (SOFTWARE) AGREEMENT

      (e)   In any event, Sensus will not consent to an assignment that does not satisfy FCC rules.

    ii.   Referencing 47 CFR 1.9010, Sensus retains *de Iure* and *de facto* control over the applicable radio facilities, including that,

      (a)   Sensus will be responsible for Customer's compliance with FCC policies and rules. Sensus represents and warrants that it has engineered the FlexNet equipment and accompanying software and other programs to comply with FCC rules. Customer will operate the FlexNet equipment subject to Sensus' supervision and control and solely in accordance with Sensus' specifications. Sensus retains the right to inspect Customer's radio operations hereunder and to terminate this Agreement or take any other necessary steps to resolve a violation of FCC rules, including to order Customer to cease transmission. Sensus will act as spectrum manager in assigning spectrum under the FCC License so as to avoid any harmful interference or other violation of FCC rules. Sensus will be responsible for resolving any interference complaints or other FCC rule violations that may arise; and

      (b)   Sensus will file any necessary FCC forms or applications and Customer agrees to reasonably assist Sensus with such filing by providing any necessary information or other cooperation. Sensus will otherwise interact with the FCC with respect to this Agreement, the FCC License or FlexNet equipment.

    I.   **Interference.** Customer agrees to report to Sensus promptly, and in no event later than 72 hours afterward, any incident related to the Leased Spectrum, including where Customer experiences harmful interference, receives a complaint or other notice of having caused harmful interference, or receives any type of communication from the FCC or other government agency regarding radio transmission.

5.   General Terms and Conditions.

    A.   **Intentionally Omitted.**

    B.   **Limitation of Liability.**

      i.   Sensus' aggregate liability in any and all causes of action arising under, out of or in relation to this Agreement, its negotiation, performance, breach or termination (collectively "Causes of Action") shall not exceed the total amount paid by Customer to Sensus' authorized distributor for Sensus Services and Software as a Service under this Agreement. This is so whether the Causes of Action are in tort, including, without limitation, negligence or strict liability, in contract, under statute or otherwise. As separate and independent limitations on liability, Sensus' liability shall be limited to direct damages. Sensus shall not be liable for; (i) any indirect, incidental, special or consequential damages; nor (ii) any revenue or profits lost by Customer or its Affiliates from any End User(s), irrespective whether such lost revenue or profits is categorized as direct damages or otherwise; nor (iii) any In/Out Costs; nor (iv) manual meter read costs and expenses; nor (v) claims made by a third party; nor (vi) damages arising from main case or bottom plate breakage caused by freezing temperatures, water hammer conditions, or excessive water pressure; nor (vii) damages arising from equipment striking the meter and damaging the meter in any way, over range capacity usage, excessive gas pressure above allowable operating pressure; nor (viii) any damage of any kind, whether to the gas meter or otherwise, arising from the use of gas meters with erosive, corrosive, or potentially freezing liquids or gasses. The limitations on liability set forth in this Agreement are fundamental inducements to Sensus entering into this Agreement. They apply unconditionally and in all respects. They are to be interpreted broadly so as to give Sensus the maximum protection permitted under law.

      ii.   To the maximum extent permitted by law, no Cause of Action may be instituted by the parties more than TWELVE (12) MONTHS after the Cause of Action first arose. In the calculation of any damages in any Cause of Action, no damages incurred more than TWELVE (12) MONTHS prior to the filing of the Cause of Action shall be recoverable.

    C.   **Termination.** Either party may terminate this Agreement earlier if the other party commits a material breach of this Agreement and such material breach is not cured within forty-five (45) days of written notice by the other party. Upon any expiration or termination of this Agreement, Sensus' and Customer's obligations hereunder shall cease and the software as a service and Spectrum Lease shall immediately cease.

    D.   **Force Majeure.** If either party becomes unable, either wholly or in part, by an event of Force Majeure, to fulfill its obligations under this Agreement, the obligations affected by the event of Force Majeure will be suspended during the continuance of that inability. The party affected by the force majeure will take reasonable steps to mitigate the Force Majeure.

    E.   **Intellectual Property Rights**.

      i.   Software and Materials. No Intellectual Property is assigned to Customer hereunder. Excluding Customer Data, Sensus shall own or continue to own all right, title, and interest in and to the Intellectual Property associated with the Software and related documentation, including any derivations and/or derivative works (the "Sensus IP"). To the extent, if any, that any ownership interest in and to such Sensus IP does not automatically vest in Sensus by virtue of this Agreement or otherwise, and instead vests in Customer, Customer agrees to grant and assign and hereby does grant and assign to Sensus all right, title, and interest that Customer may have in and to such Sensus IP. Customer agrees not to reverse engineer any Sensus Products purchased or provided hereunder.

      ii.   Customer Data. Notwithstanding the prior paragraph, as between Customer and Sensus, Customer remains the owner of all right, title or interest in or to any Customer Data. "Customer Data" means solely usage data collected by the Field Devices. To avoid doubt, Customer Data does not include non-End User usage data collected by the Field Devices, Software, or AMI System, such as network and equipment status information or the like.

      iii.   Consent to Use of Customer Data. Customer hereby irrevocably grants to Sensus a royalty-free, non-exclusive, irrevocable right and license to access, store, and use such Customer Data and any other data or information provided to Sensus, to (1) provide the Service; (2) analyze and improve the Service; (3) analyze and improve any Sensus equipment or software; or (4) for any other internal use. As used herein, "Service" means Sensus' obligations under this Agreement.

      iv.   Access to Customer Data. Within 45 days of Customer's written request, Sensus will provide Customer a copy of the previous 24 months CMEP interval file and deliver the file to a drop location specified by Customer.

    B.   **Data Privacy.** Customer acknowledges that Sensus and its Affiliates (collectively, "Xylem") will collect and process personal data for the purposes outlined in this Agreement. Xylem's data privacy policy is available at https://www.xylem.com/en-us/support/privacy/. Customer acknowledges that it has read and understood Xylem's privacy policy and agrees to the use of personal data outlined therein. The collection and use of personal data by Customer is Customer's responsibility.

    G.   **Confidentiality.** Both parties shall (and shall cause their employees and contractors to) keep all Confidential Information strictly confidential and shall not disclose it to any third party, except to the extent reasonably required to perform and enforce this Agreement or as required under applicable law, court order or regulation. The Confidential Information may be transmitted orally, in writing, electronically or otherwise observed by either party. Notwithstanding the foregoing, "Confidential Information" shall not include; (i) any information that is in the public domain other than due to Recipient's breach of this Agreement; (ii) any information in the possession of the Recipient without restriction prior to disclosure by the Discloser; or (iii) any information independently developed by the Recipient without reliance on the information disclosed hereunder by the Discloser. "Discloser" means either party that discloses Confidential Information, and "Recipient" means either party that receives it. It is understood and agreed by the parties that Customer is a public body subject to disclosure requirements, requests for inspection of public records, and record retention laws and regulations. Sensus agrees to cooperate with Customer to meet applicable regulatory and statutory deadlines in providing such responses under State law related to any documents provided by Sensus to Customer that may be considered public records. Customer shall give written notice to Sensus at the address or fax number specified in the Notice section of the Agreement, of any request for the disclosure of such records, together with a copy of the request. If Sensus does not consent to such disclosure, Sensus shall have sole responsibility for providing the defense against disclosure of such documents. The parties understand and agree that any failure by Sensus to respond within ten (10) business days to the notice from the date such notice is provided by Customer to Sensus, will constructively

ATTACHMENT A

authorize the Customer to disclose the documents and any such requested information pursuant to applicable procedures required by the record retention laws and/or regulations.

H. **Compliance with Laws.** Customer and Sensus shall comply with all applicable country, federal, state, and local laws and regulations, as set forth at the time of acceptance and as may be amended, changed, or supplemented. Customer shall not take any action, or permit the taking of any action by a third party, which may render Sensus liable for a violation of applicable laws.

    i. **Export Control Laws.** Customer shall, (i) comply with all applicable U.S. and local laws and regulations governing the use, export, import, re-export, and transfer of products, technology, and services; and (ii) obtain all required authorizations, permits, and licenses. Customer shall immediately notify Sensus, and immediately cease all activities with regards to the applicable transaction, if the Customer knows or has a reasonable suspicion that the equipment, software, or services provided hereunder may be directed to countries in violation of any export control laws. By ordering equipment, software or services, Customer certifies that it is not on any U.S. government export exclusion list.

    ii. **Anti-Corruption Laws.** Customer shall comply with the United States Foreign Corrupt Practices Act ("FCPA"), 15 U.S.C. §§ 78dd-1, et seq.; laws and regulations implementing the OECD's Convention on Combating Bribery of Foreign Public Officials in International Business Transactions; the U.N. Convention Against Corruption; the Inter-American Convention Against Corruption; and any other applicable laws and regulations relating to anticorruption in the Customer's county or any country where performance of this Agreement, or delivery or use of equipment, software or services will occur.

I. **Non-Waiver of Rights.** A waiver by either party of any breach of this Agreement or the failure or delay of either party to enforce any of the articles or other provisions of this Agreement will not in any way affect, limit or waive that party's right to enforce and compel strict compliance with the same or other articles or provisions.

J. **Assignment and Sub-contracting.** Either party may assign, transfer or delegate this Agreement without requiring the other party's consent; (i) to an Affiliate; (ii) as part of a merger; or (iii) to a purchaser of all or substantially all of its assets. Apart from the foregoing, neither party may assign, transfer or delegate this Agreement without the prior written consent of the other, which consent shall not be unreasonably withheld. Furthermore, Customer acknowledges Sensus may use subcontractors to perform RF Field Equipment installation, the systems integration work (if applicable), or project management (if applicable). Such subcontract shall require Customer's consent which shall not be unreasonably withheld.

K. **Amendments.** No alteration, amendment, or other modification shall be binding on the Parties unless agreed to in writing and signed by both Customer and by a vice president (or higher) of Sensus.

L. **Governing Law and Dispute Resolution.** This Agreement shall be governed by, construed and enforced in accordance with the laws of the State of New Mexico. Any and all disputes arising under, out of, or in relation to this Agreement, its negotiation, performance or termination ("Disputes") shall first be resolved by the Parties attempting mediation in New Mexico. If the Dispute is not resolved within sixty (60) days of the commencement of the mediation, it shall be litigated in the state or federal courts located in New Mexico. TO THE MAXIMUM EXTENT PERMITTED BY LAW, THE PARTIES AGREE TO A BENCH TRIAL AND THAT THERE SHALL BE NO JURY IN ANY DISPUTES.

M. **Restriction on Discovery.** The Parties acknowledge the abundance of documents, data, and other information stored in an electronic manner and the time and costs associated with retrieving relevant electronic data from the Parties during the Discovery portion of a claim. Accordingly, the Parties shall utilize only printed or hard-copy documents, data, and other information in Discovery and shall not use or request electronic or e-Discovery methods for any claim, demand, arbitration or litigation subject to this Agreement. All relevant and unprivileged printed or hard-copy materials shall be subject to Discovery, but neither Party has an obligation to maintain printed or hard-copy files in anticipation of a claim, demand, litigation, or arbitration proceeding.

N. **Survival.** The provisions of this Agreement that are applicable to circumstances arising after its termination or expiration shall survive such termination or expiration.

O. **Severability.** In the event any provision of this Agreement is held to be void, unlawful or otherwise unenforceable, that provision will be severed from the remainder of the Agreement and replaced automatically by a provision containing terms as nearly like the void, unlawful, or unenforceable provision as possible; and the Agreement, as so modified, will continue to be in full force and effect.

P. **Four Corners.** This written Agreement, including all of its exhibits, represents the entire understanding between and obligations of the parties and supersedes all prior understandings, agreements, negotiations, and proposals, whether written or oral, formal or informal between the parties. Any additional writings shall not modify any limitations or remedies provided in the Agreement. There are no other terms or conditions, oral, written, electronic or otherwise. There are no implied obligations. All obligations are specifically set forth in this Agreement. Further, there are no representations that induced this Agreement that are not included in it. The ONLY operative provisions are set forth in writing in this Agreement. Without limiting the generality of the foregoing, no purchase order placed by or on behalf of Customer shall alter any of the terms of this Agreement. The parties agree that such documents are for administrative purposes only, even if they have terms and conditions printed on them and even if and when they are accepted and/or processed by Sensus. Any goods, software or services delivered or provided in anticipation of this Agreement (e.g., as part of a pilot or because this Agreement has not yet been signed but the parties have begun the deployment) under purchase orders placed prior to the execution of this Agreement are governed by this Agreement upon its execution and it replaces and supersedes any such purchase orders.

Q. **Counterparts.** This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Additionally, this Agreement may be executed by facsimile or electronic copies, all of which shall be considered an original for all purposes.

6. **Definitions.** As used in this Agreement, the following terms shall have the following meanings:

A. *"Affiliate"* of a party means any other entity controlling, controlled by, or under common control with such party, where "control" of an entity means the ownership, directly or indirectly, of 50% or more of either; (i) the shares or other equity in such entity; or (ii) the voting rights in such entity.

B. *"AMI System"* identifies the Sensus FlexNet Advanced Meter Infrastructure System comprised of the SmartPoint Modules, RF Field Equipment, Server Hardware, software licenses, FCC licenses, and other equipment provided to Customer hereunder. The AMI System only includes the foregoing, as provided by Sensus. The AMI System does not include goods, equipment, software, licenses or rights provided by a third party or parties to this Agreement.

C. *"Confidential Information"* means any and all non-public information of either party, including the terms of this agreement, all technical information about either party's products or services, pricing information, marketing and marketing plans, Customer's End Users' data, AMI System performance, AMI System architecture and design, AMI System software, other business and financial information of either party, and all trade secrets of either party.

D. *"Echo Transceiver"* identifies the Sensus standalone, mounted relay device that takes the radio frequency readings from the SmartPoint Modules and relays them by radio frequency to the relevant FlexNet Base Station.

E. *"End User"* means any end user of electricity, water, and/or gas (as applicable) that pays Customer for the consumption of electricity, water, and/or gas, as applicable.

F. *"Field Devices"* means the meters and SmartPoint Modules.

G. *"FlexNet Base Station"* identifies the Sensus manufactured device consisting of one transceiver, to be located on a tower that receives readings from the SmartPoint Modules (either directly or via an Echo Transceiver) by radio frequency and passes those readings to the RNI by TCP/IP backhaul communication. For clarity, FlexNet Base Stations include Metro Base Stations.

H. *"Force Majeure"* means an event beyond a party's reasonable control, including, without limitation, acts of God, hurricane, flood, volcano, tsunami, tornado, storm, tempest, mudslide, vandalism, illegal or unauthorized radio frequency interference, strikes, lockouts, or other industrial disturbances, unavailability of component parts of any goods provided hereunder, acts of public enemies, wars, blockades, insurrections, riots, epidemics, earthquakes, fires, restraints or prohibitions by any court, board, department, commission or agency of the United States or any States, any arrests and restraints, civil disturbances and explosion.

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I. "*Hosted Software*" means those items listed as an Application in **Exhibit A**.

J. "*In/Out Costs*" means any costs and expenses incurred by Customer in transporting goods between its warehouse and its End User's premises and any costs and expenses incurred by Customer in installing, uninstalling and removing goods.

K. "*Intellectual Property*" means patents and patent applications, inventions (whether patentable or not), trademarks, service marks, trade dress, copyrights, trade secrets, know-how, data rights, specifications, drawings, designs, maskwork rights, moral rights, author's rights, and other intellectual property rights, including any derivations and/or derivative works, as may exist now or hereafter come into existence, and all renewals and extensions thereof, regardless of whether any of such rights arise under the laws of the United States or of any other state, country or jurisdiction, any registrations or applications thereof, and all goodwill pertinent thereto.

L. "*LCM*" identifies the load control modules.

M. "*Ongoing Fee*" means the annual or monthly fees, as applicable, to be paid by Customer to Sensus' authorized distributor during the Term of this Agreement.

N. "*Patches*" means patches or other maintenance releases of the Software that correct processing errors and other faults and defects found previous versions of the Software. For clarity, Patches are not Updates or Upgrades.

O. "*Permitted Use*" means only for reading Customer's Field Devices in the Service Territory. The Permitted Use does not include reading third party meters or reading meters outside the Service Territory.

P. "*Release*" means both Updates and Upgrades.

Q. "*Remote Transceiver*" identifies the Sensus standalone, mounted relay device that takes the radio frequency readings from the SmartPoint Modules and relays them directly to the RNI by TCP/IP backhaul communication.

R. "*RF Field Equipment*" means, collectively, FlexNet Base Stations, Echo Transceivers and Remote Transceivers.

S. "*RNI*" identifies the regional network interfaces consisting of hardware and software used to gather, store, and report data collected by the FlexNet Base Stations from SmartPoint Modules. The RNI hardware specifications will be provided by Sensus upon written request from Customer.

T. "*RNI Software*" identifies the Sensus proprietary software used in the RNI and any Patches, Updates, and Upgrades that are provided to Customer pursuant to the terms of this Agreement.

U. "*Service Territory*" identifies the geographic area where Customer provides electricity, water, and/or gas (as applicable) services to End Users as of the Effective Date. This area will be described on the propagation study in the parties' Spectrum Lease filing with the FCC.

V. "*Server Hardware*" means the RNI hardware.

W. "*SmartPointTM Modules*" identifies the Sensus transmission devices installed on devices such as meters, distribution automation equipment and demand/response devices located at Customer's End Users' premises that take the readings of the meters and transmit those readings by radio frequency to the relevant FlexNet Base Station, Remote Transceiver or Echo Transceiver.

X. "*Software*" means all the Sensus proprietary software provided pursuant to this Agreement, and any Patches, Updates, and Upgrades that are provided to Customer pursuant to the terms of this Agreement. The Software does not include any third party software.

Y. "*TouchCoupler Unit*" identifies an inductive coupler connection from a water register to the SmartPoint Module.

Z. "*Updates*" means releases of the Software that constitute a minor improvement in functionality.

AA. "*Upgrades*" means releases of the Software which constitute a significant improvement in functionality or architecture of the Software.

BB. *WAN Backhaul*" means the communication link between FlexNet Base Stations and Remote

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EXHIBIT D. SENSUS (SOFTWARE) AGREEMENT

Exhibit A
Software

Software as a Service

1. **Description of Services.**

    This exhibit contains the details of the Software as a Service that Sensus shall provide to Customer if both; (i) pricing for the application of Software as a Service has been provided to the Customer; and (ii) the Customer is current in its payments to Sensus' authorized distributor for such application of Software as a Service.

    A. **Software as a Service Generally.**

    Software as a Service is a managed service in which Sensus will be responsible for the day-to-day monitoring, maintenance, management, and supporting of Customer's software applications. In a Software as a Service solution, Sensus owns all components of the solution (server hardware, storage, network equipment, Sensus software, and all third-party software) required to run and operate the application. These software applications consist of the following (each an "Application"):

    - Regional Network Interface (RNI) Software
    - Sensus Analytics
      - Enhanced Package

    The managed application systems consist of the hardware, Sensus Software, and other third-party software that is required to operate the software applications. Each Application will have a production, and Disaster Recovery (as described below) environment Test environments are not provided unless otherwise specifically agreed by Sensus in writing. Sensus will manage the Applications by providing 24 x 7 x 365 monitoring of the availability and performance of the Applications.

    B. **Use of Software as a Service.** Subject to the terms of this Agreement, Sensus shall make Software as a Service available to Customer to access and use solely for the Permitted Use and solely for so long as Customer is current in its payments to Sensus or its authorized distributor for Software as a Service. The Software as a Service term commences on the date that Sensus first makes Software as a Service available to Customer for use, and ends upon the earlier of: (i) the expiration or termination of the Agreement; (ii) breach by Customer of this exhibit or the Agreement; or (iii) Customer's termination of Software as a Service as set forth in paragraph (C) below.

    C. **Termination of Software as a Service.** Customer shall have the option at any time before the end of the Term to terminate any Application by giving Sensus one hundred twenty (120) days prior written notice. Such notice, once delivered to Sensus, is irrevocable. Should Customer elect to terminate any Application, Customer acknowledges that; (a) Customer shall pay all applicable fees, including any unpaid Software as a Service fees due in the current calendar year plus a ten percent (10%) early termination fee, where such fee is calculated based on the annual Software as a Service fee due in the current calendar year; and (b) Software as a Service for such Application shall immediately cease. If Customer elects to terminate the RNI Application in the Software as a Service environment but does not terminate the Agreement generally, then upon delivery of the notice to Sensus, Customer shall purchase the necessary (a) RNI hardware from a third party and (b) RNI software license at Sensus' then-current pricing. No portion of the Software as a Service fees shall be applied to the purchase of the RNI hardware or software license.

    D. **Software as a Service** means **only** the following services:

    i. Sensus will provide the use of required hardware, located at Sensus' or a third-party's data center facility (as determined by Sensus), that is necessary to operate the Application.

    ii. Sensus will provide production and disaster recovery environments for Application.

    iii. Sensus will provide patches, updates, and upgrades to latest Sensus Hosted Software release.

    iv. Sensus will configure and manage the equipment (server hardware, routers, switches, firewalls, etc.) in the data centers:

      (a) Network addresses and virtual private networks (VPN)

      (b) Standard time source (NTP or GPS)

      (c) Security access points

      (d) Respond to relevant alarms and notifications

    v. Capacity and performance management. Sensus will:

      (a) Monitor capacity and performance of the Application server and software applications 24x7x365 using KPI metrics, thresholds, and alerts to proactively identify any potential issues related to system capacity and/or performance (i.e. database, backspool, logs, message broker storage, etc.)

      (b) If an issue is identified to have a potential impact to the system, Sensus will open an incident ticket and manage the ticket through resolution per Exhibit B, Technical Support.

      (c) Manage and maintain the performance of the server and perform any change or configuration to the server, in accordance to standard configuration and change management policies and procedures.

      (d) Manage and maintain the server storage capacity and performance of the Storage Area Network (SAN), in accordance to standard configuration and change management policies and procedures.

      (e) Exceptions may occur to the system that require Sensus to take immediate action to maintain the system capacity and performance levels, and Sensus has authority to make changes without Customer approval as needed, in accordance to standard configuration and change management policies and procedures.

    vi. Database management. Sensus will:

      (a) Define data retention plan and policy.

      (b) Monitor space and capacity requirements.

      (c) Respond to database alarms and notifications.

      (d) Install database software upgrades and patches.

      (e) Perform routine database maintenance and cleanup of database to improve capacity and performance, such as rebuilding indexes, updating indexes, consistency checks, run SQL query/agent jobs, etc.

    vii. Incident and Problem Management. Sensus will:

      (a) Proactively monitor managed systems (24x7x365) for key events and thresholds to proactively detect and identify incidents.

      (b) Respond to incidents and problems that may occur to the Application(s).

      (c) Maintain policies and procedures for responding to incidents and performing root cause analysis for ongoing problems.

      (d) Correlate incidents and problems where applicable.

      (e) Sensus personnel will use the Salesforce Self Service Portal to document and track incidents.

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(f) In the event that Sensus personnel is unable to resolve an issue, the issue will be escalated to the appropriate Subject Matter Expert (SME).

(g) Maintain responsibility for managing incident and problems through resolution and will coordinate with Customer's personnel and/or any required third-party vendor to resolve the issue.

(h) Provide telephone support consistent with Exhibit B, Technical Support in the case of undetected events.

viii. Security Management. Sensus will:

(a) Monitor the physical and cyber security of the server and Application(s) 24x7x365 to ensure system is highly secure in accordance with NIST Security Standards.

(b) Perform active intrusion prevention and detection of the data center network and firewalls, and monitor logs and alerts.

(c) Conduct period penetration testing of the network and data center facilities.

(d) Conduct monthly vulnerability scanning by both internal staff and external vendors.

(e) Perform Anti-Virus and Malware patch management on all systems.

(f) Install updates to virus protection software and related files (including Virus signature files and similar files) on all servers from the update being generally available from the anti-virus software provider.

(g) Respond to any potential threat found on the system and work to eliminate Virus or Malware found.

(h) Adhere to and submit certification to NERC/CIP Cyber Security standards.

(i) Monitors industry regulation/standards regarding security – NERC, FERC, NIST, OpenSG, etc. through the dedicated Sensus Security team.

(j) Provide secure web portal access (SSL) to the Application(s).

ix. Backup and Disaster Recovery Management. Sensus will:

(a) Perform daily backups of data providing one (1) year of history for auditing and restoration purposes.

(b) Back-up and store data (on tapes or other storage media as appropriate) off-site to provide protection against disasters and to meet file recovery needs.

(c) Conduct incremental and full back-ups to capture data, and changes to data, on the Application(s).

(d) Replicate the Application(s) environments to a geographically separated data center location to provide a full disaster recovery environment for the Application production system.

(e) Provide disaster recovery environment and perform fail-over to DR environment within forty-eight (48) hours of declared event.

(f) Generate a report following each and any disaster measuring performance against the disaster recovery plan and identification of problem areas and plans for resolution.

(g) Maintain a disaster recovery plan. In the event of a disaster, Sensus shall provide the services in accordance with the disaster recovery plan.

(h) In the case of a disaster and loss of access to or use of the Application, Sensus would use commercially reasonable efforts per the Recovery Time Objectives and Recovery Point Objectives specified herein to restore operations at the same location or at a backup location within forty-eight (48) hours.

(i) The Application shall have a Recovery Time Objective (RTO) of forty-eight (48) hours.

(j) The Recovery Point Objective (RPO) shall be a full recovery of the Application(s), with an RPO of one (1) hours, using no more than a twenty-four (24) hour old backup. All meter-related data shall be pushed from each Base Station/TGB restoring the database to real-time minus external interfaced systems from the day prior.

(k) Data from external interfaced systems shall be recreated within a forty-eight (48) hour period with the assistance of Customer personnel and staff, as needed.

E. **Customer Responsibilities:**

i. Coordinate and schedule any changes submitted by Sensus to the system in accordance with standard configuration and change management procedures.

ii. Participate in all required configuration and change management procedures.

iii. Customer will log incidents related to the managed Application with Sensus personnel via email, web portal ticket entry, or phone call.

iv. Responsible for periodic processing of accounts or readings (i.e., billing files) for Customer's billing system for billing or other analysis purposes.

v. Responsible for any field labor to troubleshoot any SmartPoint modules or smart meters in the field in populations that have been previously deployed and accepted.

vi. First response labor to troubleshoot FlexNet Base Station, R100s, Remote Transceivers or other field network equipment.

vii. Responsible for local area network configuration, management, and support.

viii. Identify and research problems with meter reads and meter read performance.

ix. Create and manage user accounts.

x. Customize application configurations.

xi. Support application users.

xii. Investigate application operational issues (e.g., meter reads, reports, alarms, etc.).

xiii. Respond to alarms and notifications.

xiv. Perform firmware upgrades over-the-air, or delegate and monitor field personnel for on-site upgrades.

F. <u>Software as a Service</u> does <u>not</u> include any of the following services:

i. Parts or labor required to repair damage to any field network equipment that is the result of a Force Majeure event.

ii. Any integration between applications, such as Harris MeterSense, would require a Professional Services contract agreement to be scoped, submitted, and agreed in a signed writing between Sensus and all the applicable parties.

If an item is not listed in subparagraphs in item (D) above, such item is excluded from the Software as a Service and is subject to additional pricing.

2. **Further Agreements**

A. **System Uptime Rate**.

i. Sensus (or its contractor) shall manage and maintain the Application(s) on computers owned or controlled by Sensus (or its contractors) and shall provide Customer access to the managed Application(s) via internet or point to point connection (i.e., Managed-Access use), according to the terms below. Sensus

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endeavors to maintain an average System Uptime Rate equal to ninety-nine (99.0) per Month (as defined below). The System Uptime Rate, cumulative across all Applications, shall be calculated as follows:

System Uptime Rate = 100 x (TMO – Total Non-Scheduled Downtime minutes in the Month)
                                                      TMO

    ii. Calculations

        a. *Targeted Minutes of Operation* or *TMO* means total minutes cumulative across all Applications in the applicable month minus the Scheduled Downtime in the Month.

        b. *Scheduled Downtime* means the number of minutes during the Month, as measured by Sensus, in which access to any Application is scheduled to be unavailable for use by Customer due to planned system maintenance. Sensus shall provide Customer notice (via email or otherwise) at least seven (7) days in advance of commencement of the Scheduled Downtime.

        c. *Non-Scheduled Downtime* means the number of minutes during the Month, as measured by Sensus, in which access to any Application is unavailable for use by Customer due to reasons other than Scheduled Downtime or the Exceptions, as defined below (e.g., due to a need for unplanned maintenance or repair).

    iii. Exceptions. Exceptions mean the following events:

- Force Majeure
- Emergency Work, as defined below; and
- Lack of Internet Availability, as described below.

        a. **Emergency Work**. In the event that Force Majeure, emergencies, dangerous conditions or other exceptional circumstances arise or continue during TMO, Sensus shall be entitled to take any actions that Sensus, in good faith, determines is necessary or advisable to prevent, remedy, mitigate, or otherwise address actual or potential harm, interruption, loss, threat, security or like concern to any of the Application(s) ("Emergency Work"). Such Emergency Work may include, but is not limited to: analysis, testing, repair, maintenance, re-setting and other servicing of the hardware, cabling, networks, software and other devices, materials and systems through which access to and/or use of the Application(s) by the Customer is made available (the "Managed Systems"). Sensus shall endeavor to provide advance notice of such Emergency Work to Customer when practicable and possible.

        b. **Lack of Internet Availability.** Sensus shall not be responsible for any deterioration of performance attributable to latencies in the public internet or point-to-point network connection operated by a third party. Customer expressly acknowledges and agrees that Sensus does not and cannot control the flow of data to or from Sensus' networks and other portions of the Internet, and that such flow depends in part on the performance of Internet services provided or controlled by third parties, and that at times, actions or inactions of such third parties can impair or disrupt data transmitted through, and/or Customer's connections to, the Internet or point-to-point data connection (or portions thereof). Although Sensus will use commercially reasonable efforts to take actions Sensus may deem appropriate to mitigate the effects of any such events, Sensus cannot guarantee that such events will not occur. Accordingly, Sensus disclaims any and all liability resulting from or relating to such events.

B. Data Center Site-Security. Although Sensus may modify such security arrangements without consent or notice to Customer, Customer acknowledges the following are the current arrangements regarding physical access to and support of the primary hardware components of the Managed Systems:

    i. The computer room(s) in which the hardware is installed is accessible only to authorized individuals.

    ii. Power infrastructure includes one or more uninterruptible power supply (UPS) devices and diesel generators or other alternative power for back-up electrical power.

    iii. Air-conditioning facilities (for humidity and temperature controls) are provided in or for such computer room(s) and can be monitored and adjusted for humidity and temperature settings and control. Such air systems are supported by redundant, back-up and/or switch-over environmental units.

    iv. Such electrical and A/C systems are monitored on an ongoing basis and personnel are available to respond to system emergencies (if any) in real time.

    v. Dry pipe pre-action fire detection and suppression systems are provided.

    vi. Data circuits are available via multiple providers and diverse paths, giving access redundancy.

C. Responsibilities of Customer.

    i. Customer shall promptly pay all Software as a Service fees.

    ii. Customer may not (i) carelessly, knowingly, intentionally or maliciously threaten, disrupt, harm, abuse or interfere with the Application(s), Managed Systems or any of their functionality, performance, security or integrity, nor attempt to do so; (ii) impersonate any person or entity, including, but not limited to, Sensus, a Sensus employee or another user; or (iii) forge, falsify, disguise or otherwise manipulate any identification information associated with Customer's access to or use of the Application(s).

    iii. The provisioning, compatibility, operation, security, support, and maintenance of Customer's hardware and software ("Customer's Systems") is exclusively the responsibility of Customer. Customer is also responsible, in particular, for correctly configuring and maintaining (i) the desktop environment used by Customer to access the Application(s) managed by Sensus; and (ii) Customer's network router and firewall, if applicable, to allow data to flow between the Customer's Systems and Sensus' Managed Systems in a secure manner via the public Internet.

    iv. Upon receiving the system administrator account from Sensus, Customer shall create username and passwords for each of Customer's authorized users and complete the applicable Sensus registration process (Authorized Users). Such usernames and passwords will allow Authorized Users to access the Application(s). Customer shall be solely responsible for maintaining the security and confidentiality of each user ID and password pair associated with Customer's account, and Sensus will not be liable for any loss, damage or liability arising from Customer's account or any user ID and password pairs associated with Customer. Customer is fully responsible for all acts and omissions that occur through the use of Customer's account and any user ID and password pairs. Customer agrees (i) not to allow anyone other than the Authorized Users to have any access to, or use of Customer's account or any user ID and password pairs at any time; (ii) to notify Sensus immediately of any actual or suspected unauthorized use of Customer's account or any of such user ID and password pairs, or any other breach or suspected breach of security, restricted use or confidentiality; and (iii) to take the Sensus-recommended steps to log out from and otherwise exit the Application(s) and Managed Systems at the end of each session. Customer agrees that Sensus shall be entitled to rely, without inquiry, on the validity of the user accessing the Application(s) application through Customer's account, account ID, usernames or passwords.

    v. Customer shall be responsible for the day-to-day operations of the Application(s) and AMI System. This includes, without limitation, (i) researching problems with meter reads and system performance, (ii) creating and managing user accounts, (iii) customizing application configurations, (iv) supporting application users, (v) investigating application operational issues, (vi) responding to alarms and notifications, and (vii) performing over-the-air commands (such as firmware updates or configuration changes).

D. Software Solution Components.

    i. **Description of Software Solutions**. Sensus software consists of a core communication module and a set of applications. Some applications are required to perform basic solution capabilities, other applications are optional and add additional capabilities and function to the overall solution. As Customer's

business process expands and/or new Sensus offerings are made available, additional applications and functionality can dynamically be added to the solution, provided Customer purchases such additional applications.

   ii. **Regional Network Interface.** The Regional Network Interface (RNI) or Sensus head-end is the centralized intelligence of the FlexNet network; the RNI's primary objective is to transfer endpoint (such as meters) data to the Customer and the advanced feature applications. The RNI is adaptable to Customer configurations by simultaneously supporting a wide range of FlexNet enabled endpoints; including but not limited to meters (electric, water, gas), street lighting, and Home Area Network devices.

      a. Core Package

         (i) Communication
1. Manages all inbound and outbound traffic to and from endpoints
2. Outbound routing optimization
3. Route analyzer
4. AES256 bit encryption of radio messages
5. Reports and metric details of network performance and troubleshooting aids
6. Management of RF equipment (base stations and endpoint radios)

        (ii) Data Collection
1. Missing read management
2. Management of duplicate reads
3. 60 day temporary storage

       (iii) Application integration
1. To Sensus Analytics applications
2. Enable 3rd party application integration
3. Batch CMEP file export
4. Real-time access through MultiSpeak 3.0 and 4.1

       (iv) Endpoint Management
1. Gas, water, electric, lighting concurrent support
2. Remote configuration
3. Remote firmware updates
4. Reports, metrics and Troubleshooting

       (v) User Management
1. Secure access
2. Password management
3. Definable user roles
4. User permissions to manage access to capabilities

      b. Integration of RNI. Sensus shall provide RNI integration support services to Customer only to the extent specifically provided below:

        (i) Sensus shall meet with the representative from the Customer's system(s) targeted for integration to determine which integration method is appropriate (e.g., Multispeak, CMEP, etc.).
1. In scope and included integration efforts: Provide the gateway URLs to the integrating system as needed, provide Customer with standard integration API documentation, validate and test that the correct Customer information is flowing into and/or out of the RNI.
2. Out of scope and subject to additional charges: Modifications or extensions to the standard API provided by Sensus and any integration efforts not outlined above as in scope and included.

        (ii) Customer Responsibilities:
1. Provide Sensus with information about the relevant information Customer wishes to transfer and integrate with the RNI.
2. Establish the network and security required for the two systems to reasonably communicate.
3. Verify integration to third party system functionality is working as intended.

        (iii) If an item is not listed in subparagraph (i) above, such item is excluded from the integration of Sensus RNI Support and is subject to additional pricing.

3. **Sensus Analytics**

Sensus Analytics is a cloud-based solution and data platform that allows storage and retrieval of raw reads and data from other sources for analysis, exportation, and inquiry or reporting. The platform provides applications and reporting capabilities.

   A. **Essential Package**. The Essential Package of the Sensus Analytics Application shall consist of the following modules:

      i. Device Access

        a. Allows search for meter details by using data imported from the billing system or the Sensus Device ID or AMI ID.

        b. Allows a view of the meter interval or register reads.

        c. Meter data is available to be copied, printed, or saved to certain user programs or file formats, specifically CSV, PDF, and Spreadsheet.

        d. Allows the current and historical data to be viewed.

        e. Allows the current usage to be compared to historical distribution averages.

        f. Allows the user to see the meter location on a map view.

        g. Allows notifications for an event on a single meter to be forwarded to a Customer employee.

        h. Allows details to be viewed about a meter – (dependent on the data integrated from other systems).

      ii. Meter Insight (provides the following)

        a. # of active meters.

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       b.   # of orphaned meters with drill down to the list of meters.

       c.   # of inactive meters with usage drill down to the list of meters.

       d.   # of stale meters with drill down to the list of meters.

       e.   # of almost stale meters with drill down to the list of meters.

       f.   # of meters where no read is available with drill down to the list of meters.

       g.   # of meters with maximum threshold exceptions with drill down to the list of meters.

       h.   # of meters with minimum threshold exceptions with drill down to the list of meters.

       i.   # of unknown radios with drill down to the list of meters.

   iii.   Report Access

       a.   Allows the user to see meter alarms and choose a report from a list of standard reports.

       b.   Master Route Register Reads: Shows the latest reads for all meters within specified time window.

       c.   Meter Route Intervals Reads: Allows users to inspect intervals of a single meter over a period of time.

       d.   Master Route No Readings: List all meters that are active in the system, but have not been sending reads within the specified time window.

       e.   Consumption Report: List meters' consumption based on meter readings within the specified time window.

       f.   Zero Consumption for Period: List meters whose readings do not change over a period of time.

       g.   Negative Consumption: Shows the number of occurrences and readings of negative consumption for the last 24hr, 48hr and 72hr from the entered roll up date.

       h.   High Low Exception Report: Displays meters whose reads exceed minimum or/and maximum threshold, within a time range.

       i.   Consumption vs Previous Reported Read: Compares latest reading (from RNI) with last known read received from CIS.

       j.   Consumption Exception 24 hour Report: This report shows meters that satisfy these two conditions: (1) The daily average consumptions exceed entered daily consumption threshold; (2) The number of days when daily thresholds are exceeded are greater than the entered exception per day threshold.

       k.   Endpoint Details: Shows the current state of meters that are created within the specified time range.

       l.   Orphaned Meters: List meters that are marked as 'orphaned', which are created as of entered Created as of parameter.

       m.   Billing Request Mismatch: Displays meters in a billing request that have different AMR id with the ones sent by RNI. It also shows AMR id in billing request that have different meter Id in the RNI. Users must enter which billing request file prior to running the report.

       n.   All Alarms Report: List all alarms occurred during a time window. Users can select which alarm to show.

   iv.   Billing Access

       a.   Initiate the creation of billing export files formatted to the import needs of the billing system.

       b.   Receive billing request files from the billing system to identify what meters to include in the billing export file in the case where billing request file option is used.

       c.   Provides a repository of past billing files that were either used for billing preparation or actually sent to the billing system.

       d.   Will store created billing files for a period of three years unless otherwise denoted.

       e.   The system will allow creation of test files before export to the billing system.

   v.   Billing Adaptor

       a.   The underlying configurator and tools mapping the extraction of billing data to enable integration to the utility's billing system.

   vi.   Data Store

       a.   Allows storage of meter reading data including Intervals, Registers, and Alarms to be stored.

       b.   Stored data is available online for reports and analysis.

       c.   Data will be retained for 3 years. Additional duration can be purchased.

B.   **Enhanced Package.** The Enhanced Package shall consist of the modules listed above in the Essential Package, as well as the following additional modules:

   i.   Alarm Insight

       a.   Allows the user to summarize and filter alarms by a date range.

       b.   Allows the user to review all alarm types on a single screen.

       c.   The user can filter out the alarms not wanted on the screen.

       d.   Alarm totals can be visualized.

       e.   Adds a view of trending alarms over time.

       f.   Click to drill down on an alarm to gain more information on specific events.

       g.   Click to analyze a specific event on a particular device.

   ii.   Alert Manager

       a.   Allows creation of alert groups who will be notified when an alarm occurs.

       b.   Users can manage alert groups by adding and removing group members.

       c.   Allows selection of notification method for how end users in the group will be notified; email or SMS (text message).

       d.   Allows creation of an alert from the available system events from smart points and assign to a group.

       e.   Monitors the systems meters for events. When an event is triggered, all users in the group will be notified.

C.   **Integration of Sensus Analytics.** Sensus shall provide integration support services to Customer only to the extent specifically provided below:

   i.   Sensus shall provide Customer with a simple flat file specification known as VFlex for the integration of the Customer's back office system to the Sensus Analytics modules. The VFlex shall contain the following types of information: Device ids, end users in the system, end user status, end user account information, end user name, and other end user details. This flat file may be delimited or fixed width. Customer shall produce this file and transmit it to the FTP location designated by Sensus. When sent to the Sensus FTP servers, this file exchange will enable the system to become operational with the

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EXHIBIT D. SENSUS (SOFTWARE) AGREEMENT

Customer's systems. Customer shall produce this file and transmit it to the FTP location designated by Sensus. Sensus will provide reasonable support to explain to Customer the required vs. optional fields that are in the specification, testing and validation of the file format and content.

ii. In scope and included integration efforts: kick-off meeting to engage all required parties, mapping the Customer's fields to the VFlex specification, validation of expected output, and a two (2) hour system review of Sensus Analytics application and integration with the Customer's system (conducted remotely).

iii. Out of scope and subject to additional charges will be the transformation of data where business logic including code must be written to modify the field content or format of the data to meet the VFlex specification.

iv. Sensus' integration services consist of four (4) hours of assistance (remote or on-site, as determined by Sensus). If additional time is needed to complete the integration efforts, Sensus shall invoice Customer for additional fees on an actual time and materials basis.

v. **If an item is not listed in subparagraphs (i) or (ii) above, such item is excluded from the integration of Sensus Analytics Support and is subject to additional pricing.**

vi. **Data Import.** The Sensus Analytics Application contains adapters for the import of data from; (a) Customer's FlexNet AMI System; and/or (b) AutoRead application for handheld and drive by systems, as applicable.

vii. **Customer Acknowledgements.**

    a. Customer acknowledges that the Sensus Analytics Application provides up to fifty (50) user logins for Customer's use.

    b. Customer acknowledges and agrees the Sensus Analytics Application is based upon the actual number of End Users within Customer's Service Territory. Pricing may increase if Customer's Service Territory or actual number of End Users expands.

    c. Customer acknowledges that all data related to the Sensus Analytics Applications is geographically hosted within the United States of America. Customer accepts the geographic location of such hosting, and indemnifies Sensus for any claims resulting therefrom.

    d. Customer acknowledges and agrees that the Intellectual Property provisions of this Agreement apply in all respects to Customer's access to and use of the Sensus Analytics Applications.

    e. Customer is responsible for validating the data analyzed by the Sensus Analytics Applications. Sensus makes no promises of improving Customer's operations or saving Customer money, nor is Sensus liable for any damages resulting from decisions made by Customer related to Customer's use of Sensus Analytics.

4. **Third Party Software.**

    A. **RedHat Linux.**If Sensus is providing Customer with a license to use RedHat Linux Software, Customer agrees to the following:

    By entering into this Agreement, Customer agrees to abide by and to be legally bound by the terms and conditions of the Red Hat End User License Agreements identified below, each of which are incorporated into this Agreement by reference and are available at the websites identified below. Please read the Red Hat End User License Agreements and incorporated references carefully.

Subscription:	End User License Agreement:
Red Hat Enterprise Linux	http://www.redhat.com/licenses/rhel_rha_eula.html
JBoss Enterprise Middleware	http://www.redhat.com/licenses/jboss_eula.html

ATTACHMENT A

Exhibit B
Technical Support

1. **Introduction**

Sensus Technical Services provides utility customers with a single point of contact for Tier 1 support of technical issues as well as any coordination of additional resources required to resolve the issue. Requests that require specialized skills are to be forwarded to a senior support engineer or Technical Advisor within the team for further analysis. If Technical Services has exhausted all troubleshooting efforts for the product type, the issue will escalate to the Engineering Support Team. Occasionally, on-site troubleshooting/analysis may be required. The preferred order of on-site support is:

a) The Customer (for assistance with the easiest and lowest time-consuming activities such as power on/power off).

b) The local distributor.

c) Sensus employees or contracted personnel, if required to fulfill a contract commitment.

2. **Support Categories**

2.1. General questions regarding functionality, use of product, how-to, and requests for assistance on Sensus AMR, AMI, RF Network Equipment, Metering Products and Sensus Lighting Control.

2.2. Proactive reporting and resolution of problems.

2.3. Reactive reporting to isolate, document, and solve reported hardware/software defects.

2.4. Responding to service requests and product changes.

2.5. Addressing customer inquiries with printed or electronic documentation, examples, or additional explanation/clarification.

3. **Support Hours**

3.1. Standard Support Hours: Toll-free telephone support (1-800-638-3748 option #2) is available Monday thru Friday from 8:00AM EST to 8:00PM EST. After-hours, holiday and weekend support for Severity 1 and Severity 2 issues is available by calling 1-800-638-3748, option #8.

4. **Support Procedures**

4.1. Customer identifies an issue or potential problem and calls Technical Services at 1-800-638-3748 Option #2. The Customer Service Associate or Technical Support Engineer will submit a Support ticket.

4.2. The Customer Service Associate or Technical Support Engineer will identify the caller name and utility by the assigned software serial number, city, and state in which the call originated. The nature of the problem and severity levels will be agreed upon by both parties (either at the time the issue is entered or prior to upgrading or downgrading an existing issue) using the severity definitions below as a guideline. The severity level is then captured into a support ticket for creation and resolution processing. Any time during the processing of this ticket, if the severity level is changed by Sensus, the customer will be updated.

Severity Levels Description:

Sev1 Customer's production system is down. The system is unusable resulting in total disruption of work. No workaround is available and requires immediate attention.

Example: Network mass outage, all reading collection devices inoperable, inoperable head end software (e.g., RNI Software, Sensus MDM).

Sev2 Major system feature/function failure. Operations are severely restricted; there is a major disruption of work, no acceptable work-around is available, and failure requires immediate attention.

Examples: Network equipment failure (e.g., FlexNet Echo, FlexNet Remote, Base Station transceiver, or VGB); inoperable reading devices (e.g., AR5500, VXU, VGB, or CommandLink); head end software application has important functionality not working and cannot create export file for billing system operations.

Sev3 The system is usable and the issue doesn't affect critical overall operation.

Example: Minor network equipment failure (e.g., Echo/Remote false alarms or Base Station transceiver false alarms); head end software application operable but reports are not running properly, modification of view or some non-critical function of the software is not running.

Sev4 Minor system issues, questions, new features, or enhancement requests to be corrected in future versions.

Examples: Minor system issues, general questions, and "How-To" questions.

4.3. The Customer Service Associate or Technical Support Engineer identifies whether or not the customer is on support. If the customer is not on support, the customer is advised of the service options as well as any applicable charges that may be billed.

4.4. Calls are placed in a queue from which they are accessible to Technical Support Engineers on a first-come-first-serve basis. A first level Customer Service Associate may assist the customer, depending on the difficulty of the call and the representative's technical knowledge. Technical Support Engineers (Tier 1 support) typically respond/resolve the majority of calls based on their product knowledge and experience. A call history for the particular account is researched to note any existing pattern or if the call is a new report. This research provides the representative a basis and understanding of the account as well as any associated problems and/or resolutions that have been communicated.

a. Technical Services confirms that there is an issue or problem that needs further analysis to determine its cause. The following information must be collected: a detailed description of the issue's symptoms, details on the software/hardware product and version, a description of the environment in which the issue arises, and a list of any corrective action already taken.

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b. Technical Services will check the internal database and product defect tracking system, to see if reports of a similar problem exist, and if any working solutions were provided. If an existing resolution is found that will address the reported issue, it shall be communicated to the customer. Once it is confirmed that the issue has been resolved, the ticket is closed.

c. If there is no known defect or support that defines the behavior, Technical Services will work with the customer to reproduce the issue. If the issue can be reproduced, either at the customer site or within support center test lab, Technical Services will escalate the ticket for further investigation / resolution.

If the issue involves units that are considered to be defective with no known reason, the representative will open a Special Investigation RMA through the Support system. If it is determined that a sample is required for further analysis, the customer will be provided with instructions that detail where to send the product sample(s) for a root cause analysis. Once it is determined that the issue cannot be resolved by Tier 1 resources, the ticket will be escalated to Tier 2 support for confirmation/workarounds to resolve immediate issue. Technical Services will immediately contact the customer to advise of the escalation. The response and escalation times are listed in Section 5. At this time, screen shots, log files, configuration files, and database backups will be created and attached to the ticket.

5. **Response and Resolution Targets.**

Sensus Technical Support will make every reasonable effort to meet the following response and resolution targets:

Severity	Standard Target Response	Standard Target Resolution	Resolution (one or more of the following)
1	30 Minutes	Immediately assign trained and qualified Services Staff to correct the error on an expedited basis. Provide ongoing communication on the status of a correction.	• Satisfactory workaround is provided. • Program patch is provided. • Fix incorporated into future release. • Fix or workaround incorporated into the Support Knowledge Base.
2	4 hours	Assign trained and qualified Services Staff to correct the error. Provide communication as updates occur.	• Satisfactory workaround is provided. • Program patch is provided. • Fix incorporated into future release. • Fix or workaround incorporated into the Support Knowledge Base.
3	1 Business Day	90 business days	• Answer to question is provided. • Satisfactory workaround is provided. • Fix or workaround incorporated into the Support Knowledge Base. • Fix incorporated into future release.
4	2 Business Days	12 months	• Answer to question is provided. • Fix or workaround incorporated into the Support Knowledge Base.

6. **Problem Escalation Process.**

6.1. If the normal support process does not produce the desired results, or if the severity has changed, the issue may be escalated as follows to a higher level of authority.

6.1.1. Severity 1 issues are escalated by Sales or Technical Services to a Supervisor if not resolved within 2 hours; to the Manager level if not resolved within 4 hours; to the Director level if not resolved within the same business day; and to the VP level if not resolved within 24 hours.

6.1.2. A customer may escalate an issue by calling 1-800-638-3748, Option 2. Please specify the Support ticket number and the reason why the issue is being escalated.

6.1.3. In the event that a customer is not satisfied with the level of support or continual problem with their products, they may escalate a given Support ticket to Manager of Technical Services (1-800-638-3748, Option 2).

7. **General Support Provisions and Exclusions.**

7.1. Sensus provides online documentation for Sensus products through the Sensus User Forum (http://myflexnetsystem.com/Module/User/Login). All Sensus customers are provided access to this online database, which includes operation, configuration and technical manuals. Sensus also hosts periodic user group teleconferences to facilitate the interchange of product ideas, product enhancements, and overall customer experiences. The customer shall provide names and email accounts to Sensus so Sensus may provide access to the Portal.

7.2. Specialized support from Sensus is available on a fee basis to address support issues outside the scope of this support plan or if not covered under another specific maintenance contract. For example, specialized systems integration services or out of warranty network equipment repair that is not covered under a separate maintenance contract.

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Exhibit E. Ferguson Proposed and Estimated Project Schedule and Times (Draft)

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EXHIBIT E. Proposed Project Schedule
(To be modified by the Parties)

ID	Los Alamos County AMI Deployemt	Duration	Start	Finish
1	**Los Alamos County AMI Project Plan**	**326 days**	Mon 4/3/17	**Mon 7/2/18**
2	**Intent to Award Announcement**	0 days	Mon 4/3/17	Mon 4/3/17
3	**Contract Negotiations**	2 mons	Mon 4/3/17	Fri 5/26/17
4	**Contract Award / PM Assigned**	1 mon	Tue 5/2/17	Mon 5/29/17
5	**AEM and RF Engineer Assigned**	0 days	Tue 5/30/17	Tue 5/30/17
6	**Notice To Proceed**	0 days	Thu 6/1/17	Thu 6/1/17
7	**Gather Project Information and Documentation**	**0.25 days**	**Fri 6/2/17**	Fri 6/2/17
8	Obtain a copy of the Contract or SOW	1 hr	Fri 6/2/17	Fri 6/2/17
9	Obtain a copy of the Updated Purchase Order	1 hr	Fri 6/2/17	Fri 6/2/17
10	Update Project Charter document (Overall Scope of Work)	2 hrs	Fri 6/2/17	Fri 6/2/17
11	Obtain a copy of the Updated System Design Documentation (Network diagram, RNI Specifications)	2 hrs	Fri 6/2/17	Fri 6/2/17
12	Update Project Contact List (Sensus contacts, Customer contacts, shipping address)	2 hrs	Fri 6/2/17	Fri 6/2/17
13	**Pre-Deployment Planning Los Alamos County**	**10.13 days**	Wed 6/7/17	**Wed 6/21/17**
14	**Sensus Internal Kick-off**	**4.5 days**	**Wed 6/7/17**	**Tue 6/13/17**
15	Create project requirements list	1 day	Wed 6/7/17	Thu 6/8/17
16	Determine Systems Acceptance Test Criteria	1 day	Thu 6/8/17	Fri 6/9/17
17	Determine First Article Test Requirements	1 day	Fri 6/9/17	Mon 6/12/17
18	Create equipment (hardware) deliverables list	4 hrs	Mon 6/12/17	Mon 6/12/17
19	Create Purchase Orders	4 hrs	Mon 6/12/17	Tue 6/13/17
20	Create Work Breakdown Structure	4 hrs	Tue 6/13/17	Tue 6/13/17
21	**Perform site survey at each Basestaion site**	**4.63 days**	**Wed 6/14/17**	**Wed 6/21/17**
22	Determine that towers are serviceable for installation	8 hrs	Wed 6/14/17	Thu 6/15/17
23	**Determine antenna height and attachment point**	**0.38 days**	**Thu 6/15/17**	**Fri 6/16/17**
24	If Omni antenna must be on top of tower or on 3 foot stand off	1 hr	Thu 6/15/17	Thu 6/15/17
25	Determine attachment point and mounting hardware	2 hrs	Thu 6/15/17	Fri 6/16/17
26	**Determine coax cable routing**	**1 day**	**Fri 6/16/17**	**Mon 6/19/17**
27	Determine coax cable attachment points	2 hrs	Fri 6/16/17	Fri 6/16/17
28	Determine coax cable attachment hardware	2 hrs	Fri 6/16/17	Fri 6/16/17
29	Determine conduit requirements (routing, length, attachment, hardware)	4 hrs	Fri 6/16/17	Mon 6/19/17
30	**Determine routing of coax between tower base and Basestation**	**0.5 days**	**Mon 6/19/17**	**Mon 6/19/17**
31	Determine conduit requirement or ice bridge	4 hrs	Mon 6/19/17	Mon 6/19/17
32	Determine trenching requirement	4 hrs	Mon 6/19/17	Mon 6/19/17
33	**Determine appropriate power source available**	**0.5 days**	**Mon 6/19/17**	**Tue 6/20/17**
34	Determine scope of work to get electric power to TBasestations	4 hrs	Mon 6/19/17	Tue 6/20/17
35	Determine trenching requirement	4 hrs	Mon 6/19/17	Tue 6/20/17
36	**Determine proper ground field available**	**0.25 days**	**Tue 6/20/17**	**Tue 6/20/17**
37	Ground field at tower base for Basestation	2 hrs	Tue 6/20/17	Tue 6/20/17
38	Ground connection at antenna base	2 hrs	Tue 6/20/17	Tue 6/20/17
39	**Create Basestation & tower equipment installation statement of work document**	8 hrs	Tue 6/20/17	Wed 6/21/17
40	**Endpoint Deployment Planning**	**1.5 days**	**Mon 6/12/17**	**Tue 6/13/17**
41	Develop preliminary deployment schedule	4 hrs	Mon 6/12/17	Mon 6/12/17
42	Meet with Sensus Technical Service to review project requirements and their role & responsibility	0.5 days	Mon 6/12/17	Mon 6/12/17
43	Meet with Contract Meter Installers	0.5 days	Mon 6/12/17	Mon 6/12/17
44	Finalize deployment schedule	1 day	Mon 6/12/17	Mon 6/12/17

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ID	Los Alamos County AMI Deployemt	Duration	Start	Finish
45	Sensus Internal Kick-off	0.5 days	Mon 6/12/17	Mon 6/12/17
46	**Los Alamos County County Kick-off Meeting**	**3 days**	**Tue 6/13/17**	**Fri 6/16/17**
47	Review Sensus project deployment process	4 hrs	Tue 6/13/17	Tue 6/13/17
48	Review contract or statement of work	4 hrs	Wed 6/14/17	Wed 6/14/17
49	Review roles and responsibilities for the project	2 hrs	Tue 6/13/17	Tue 6/13/17
50	**Review prop study, network design, tower locations and backhaul requirements**	**2.75 days**	**Tue 6/13/17**	**Fri 6/16/17**
51	Review network design document and get Los Alamos County IP addresses, default router, subnet mask	2 hrs	Tue 6/13/17	Tue 6/13/17
52	Los Alamos County to provide WAN equipment	1 hr	Tue 6/13/17	Tue 6/13/17
53	Define user accounts required	2 hrs	Wed 6/14/17	Wed 6/14/17
54	Define customer training requirements	2 hrs	Wed 6/14/17	Wed 6/14/17
55	Define meter testing in meter shop (First Article)	4 hrs	Wed 6/14/17	Wed 6/14/17
56	Discuss installation process	2 hrs	Thu 6/15/17	Thu 6/15/17
57	Discuss customer expectations for the project and execution	6 hrs	Thu 6/15/17	Thu 6/15/17
58	Define data interface between RNI and MDMS	4 hrs	Fri 6/16/17	Fri 6/16/17
59	**Review the Project System Acceptance Test Plan**	**1 day**	**Fri 6/16/17**	**Mon 6/19/17**
60	Review the Project Acceptance test process	4 hrs	Fri 6/16/17	Fri 6/16/17
61	Define the meter routes / black out windows to be included in the acceptance test plan	2 hrs	Mon 6/19/17	Mon 6/19/17
62	Review and adjust preliminary schedule	2 hrs	Mon 6/19/17	Mon 6/19/17
63	**Basestation Deployment Planning**	**5 days**	**Thu 6/22/17**	**Wed 6/28/17**
64	**Verify with Network Engineering Group that antenna height is what was used for propagation study**	**4 hrs**	**Thu 6/22/17**	**Thu 6/22/17**
65	If different adjust or re-run prop study	1 day	Thu 6/22/17	Thu 6/22/17
66	Create Scope of Work document for Base Station install based on site survey	3 days	Thu 6/22/17	Mon 6/26/17
67	Review attachment requirements for data backhaul	4 hrs	Thu 6/22/17	Thu 6/22/17
68	**Phase 1**	**270 days**	**Mon 3/27/17**	**Fri 4/6/18**
69	**AMI / MDMS Infrastructure Installation**	**270 days**	**Thu 6/8/17**	**Wed 6/20/18**
70	**FlexNet Head End System Design and Installation**	**43.5 days**	**Thu 6/8/17**	**Tue 8/8/17**
71	Provide planning session with Los Alamos County to define security and 3rd party software requirements	5 days	Thu 6/8/17	Wed 6/14/17
72	Create SaaS RNI VM Instance	1 day	Thu 6/15/17	Thu 6/15/17
73	Develop required IT hardware/ software/Integration requirements for all head end operating environments	15 days	Fri 6/16/17	Thu 7/6/17
74	Complete AMI System Integrations	15 days	Fri 7/7/17	Thu 7/27/17
75	Provide required Los Alamos County staff, facility and on-line access to live RNI Environment for training	4 hrs	Fri 7/28/17	Fri 7/28/17
76	Provide local SME delivered training on FlexNet Head End System role based operation and maintenance.	2 days	Fri 7/28/17	Tue 8/1/17
77	Complete Head End System testing	5 days	Tue 8/1/17	Tue 8/8/17
78	**MDMS Installation**	**45.5 days**	**Fri 6/16/17**	**Fri 8/18/17**
79	Install MDMS	4 days	Fri 6/16/17	Wed 6/21/17
80	Test RNI to MDMS Interface via file exchange or MultiSpeak 4.1, CMEP, MV-RS	1 day	Tue 8/8/17	Wed 8/9/17
81	Provide on site MDMS Training	2 days	Wed 8/16/17	Fri 8/18/17
82	**Basestation Deployment Phase Phase 1**	**2 days**	**Mon 6/26/17**	**Tue 6/27/17**
83	**Basestation Barranca_Tank**	**1 day**	**Mon 6/26/17**	**Mon 6/26/17**
84	**Mechanical Work**	**1 day**	**Mon 6/26/17**	**Mon 6/26/17**

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ID	Los Alamos County AMI Deploymet	Duration	Start	Finish	B
85	Mount antenna to tower	1 hr	Mon 6/26/17	Mon 6/26/17	
86	Mount GPS antenna	1 hr	Mon 6/26/17	Mon 6/26/17	
87	If conduit required down side of tower - install conduit on tower	1 hr	Mon 6/26/17	Mon 6/26/17	
88	Install coax cable from antenna to Basestation	8 hrs	Mon 6/26/17	Mon 6/26/17	
89	Install poly-phase at each end of coax with appropriate ground connection	2 hrs	Mon 6/26/17	Mon 6/26/17	
90	**Electrical Work**	**0.06 days**	**Mon 6/26/17**	**Mon 6/26/17**	
91	Certify available ground field or install new ground field	0.5 hrs	Mon 6/26/17	Mon 6/26/17	
92	Install ground strap between Basestation and ground field	0.5 hrs	Mon 6/26/17	Mon 6/26/17	
93	Connect Basestation to available power	0.5 hrs	Mon 6/26/17	Mon 6/26/17	
94	Connect data cable to Basestation	0.5 hrs	Mon 6/26/17	Mon 6/26/17	
95	**Backhaul Communications**	**0.13 days**	**Mon 6/26/17**	**Mon 6/26/17**	
96	Configure IP address, Default Route, and Subnet mask	1 hr	Mon 6/26/17	Mon 6/26/17	
97	**Basestation Configuration**	**0.13 days**	**Mon 6/26/17**	**Mon 6/26/17**	
98	Program Basestation to operate on the IP network (firewall security)	0.5 hrs	Mon 6/26/17	Mon 6/26/17	
99	Test Basestation receive & transmit functionality	1 hr	Mon 6/26/17	Mon 6/26/17	
100	Test remote access to Basestation	1 hr	Mon 6/26/17	Mon 6/26/17	
101	Document Network IP addresses	0.5 hrs	Mon 6/26/17	Mon 6/26/17	
102	**Base Station Quemazon_Tank**	**1 day**	**Tue 6/27/17**	**Tue 6/27/17**	
103	**Mechanical Work**	**1 day**	**Tue 6/27/17**	**Tue 6/27/17**	
104	Mount antenna to tower	1 hr	Tue 6/27/17	Tue 6/27/17	
105	Mount GPS antenna	1 hr	Tue 6/27/17	Tue 6/27/17	
106	If conduit required down side of tower - install conduit on tower	1 hr	Tue 6/27/17	Tue 6/27/17	
107	Install coax cable from antenna to Basestation	1 hr	Tue 6/27/17	Tue 6/27/17	
108	Install poly-phase at each end of coax with appropriate ground connection	2 hrs	Tue 6/27/17	Tue 6/27/17	
109	**Electrical Work**	**0.06 days**	**Tue 6/27/17**	**Tue 6/27/17**	
110	Certify available ground field or install new ground field	0.5 hrs	Tue 6/27/17	Tue 6/27/17	
111	Install ground strap between Basestation and ground field	0.5 hrs	Tue 6/27/17	Tue 6/27/17	
112	Connect Basestation to available power	0.5 hrs	Tue 6/27/17	Tue 6/27/17	
113	Connect data cable to Basestation	0.5 hrs	Tue 6/27/17	Tue 6/27/17	
114	**Backhaul Communications**	**0.13 days**	**Tue 6/27/17**	**Tue 6/27/17**	
115	Configure IP address, Default Route, and Subnet mask	1 hr	Tue 6/27/17	Tue 6/27/17	
116	**Basestation Configuration**	**0.13 days**	**Tue 6/27/17**	**Tue 6/27/17**	
117	Program Basestation to operate on the IP network (firewall security)	0.5 hrs	Tue 6/27/17	Tue 6/27/17	
118	Test Basestation receive & transmit functionality	1 hr	Tue 6/27/17	Tue 6/27/17	
119	Test remote access to Basestation	1 hr	Tue 6/27/17	Tue 6/27/17	
120	Document Network IP addresses	0.5 hrs	Tue 6/27/17	Tue 6/27/17	
121	**Base Station Water_Production_Tank**	**1 day**	**Wed 6/28/17**	**Wed 6/28/17**	
122	**Mechanical Work**	**1 day**	**Wed 6/28/17**	**Wed 6/28/17**	
123	Mount antenna to tower	1 hr	Wed 6/28/17	Wed 6/28/17	
124	Mount GPS antenna	1 hr	Wed 6/28/17	Wed 6/28/17	
125	If conduit required down side of tower - install conduit on tower	1 hr	Wed 6/28/17	Wed 6/28/17	
126	Install coax cable from antenna to Basestation	1 hr	Wed 6/28/17	Wed 6/28/17	
127	Install poly-phase at each end of coax with appropriate ground connection	2 hrs	Wed 6/28/17	Wed 6/28/17	
128	**Electrical Work**	**0.06 days**	**Wed 6/28/17**	**Wed 6/28/17**	

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ID	Los Alamos County AMI Deployemt	Duration	Start	Finish	
					B
129	Certify available ground field or install new ground field	0.5 hrs	Wed 6/28/17	Wed 6/28/17	
130	Install ground strap between Basestation and ground field	0.5 hrs	Wed 6/28/17	Wed 6/28/17	
131	Connect Basestation to available power	0.5 hrs	Wed 6/28/17	Wed 6/28/17	
132	Connect data cable to Basestation	0.5 hrs	Wed 6/28/17	Wed 6/28/17	
133	**Backhaul Communications**	**0.13 days**	**Wed 6/28/17**	**Wed 6/28/17**	
134	Configure IP address, Default Route, and Subnet mask	1 hr	Wed 6/28/17	Wed 6/28/17	
135	**Basestation Configuration**	**0.13 days**	**Wed 6/28/17**	**Wed 6/28/17**	
136	Program Basestation to operate on the IP network (firewall security)	0.5 hrs	Wed 6/28/17	Wed 6/28/17	
137	Test Basestation receive & transmit functionality	1 hr	Wed 6/28/17	Wed 6/28/17	
138	Test remote access to Basestation	1 hr	Wed 6/28/17	Wed 6/28/17	
139	Document Network IP addresses	0.5 hrs	Wed 6/28/17	Wed 6/28/17	
140	**Base Station SE Sector**	**1 day**	**Thu 6/29/17**	**Thu 6/29/17**	
141	**Mechanical Work**	**1 day**	**Thu 6/29/17**	**Thu 6/29/17**	
142	Mount antenna to tower	1 hr	Thu 6/29/17	Thu 6/29/17	
143	Mount GPS antenna	1 hr	Thu 6/29/17	Thu 6/29/17	
144	If conduit required down side of tower - install conduit on tower	1 hr	Thu 6/29/17	Thu 6/29/17	
145	Install coax cable from antenna to Basestation	8 hrs	Thu 6/29/17	Thu 6/29/17	
146	Install poly-phase at each end of coax with appropriate ground connection	2 hrs	Thu 6/29/17	Thu 6/29/17	
147	**Electrical Work**	**0.06 days**	**Thu 6/29/17**	**Thu 6/29/17**	
148	Certify available ground field or install new ground field	0.5 hrs	Thu 6/29/17	Thu 6/29/17	
149	Install ground strap between Basestation and ground field	0.5 hrs	Thu 6/29/17	Thu 6/29/17	
150	Connect Basestation to available power	0.5 hrs	Thu 6/29/17	Thu 6/29/17	
151	Connect data cable to Basestation	0.5 hrs	Thu 6/29/17	Thu 6/29/17	
152	**Backhaul Communications**	**0.13 days**	**Thu 6/29/17**	**Thu 6/29/17**	
153	Configure IP address, Default Route, and Subnet mask	1 hr	Thu 6/29/17	Thu 6/29/17	
154	**Basestation Configuration**	**0.13 days**	**Thu 6/29/17**	**Thu 6/29/17**	
155	Program Basestation to operate on the IP network (firewall security)	0.5 hrs	Thu 6/29/17	Thu 6/29/17	
156	Test Basestation receive & transmit functionality	1 hr	Thu 6/29/17	Thu 6/29/17	
157	Test remote access to Basestation	1 hr	Thu 6/29/17	Thu 6/29/17	
158	Document Network IP addresses	0.5 hrs	Thu 6/29/17	Thu 6/29/17	
159	**Certify Basestaions #1 - 4**	1 day	Mon 7/3/17	Mon 7/3/17	
160	Endpoint Initial Training and Phase 1 Installation	**5 days**	**Tue 7/4/17**	**Mon 7/10/17**	
161	Meter Shop begins First Article Testing (all meter forms & module types)	1 wk	Tue 7/4/17	Mon 7/10/17	
162	First Article Testing Complete	0 days	Mon 7/10/17	Mon 7/10/17	
163	**Meter Installer Training**	**2 days**	**Tue 7/11/17**	**Wed 7/12/17**	
164	**Contract Meter Installer Training**	**1 day**	**Tue 7/11/17**	**Tue 7/11/17**	
165	Train on proper endpoint installation	2 hrs	Tue 7/11/17	Tue 7/11/17	
166	Train on CMI handheld/ FMT operation	2 hrs	Tue 7/11/17	Tue 7/11/17	
167	Train on work order requirements - we need daily reports on meter #, radio #, account, address	1 hr	Tue 7/11/17	Tue 7/11/17	
168	Train on verification of endpoint activation	1 hr	Tue 7/11/17	Tue 7/11/17	
169	Train on troubleshooting bad endpoints	2 hrs	Tue 7/11/17	Tue 7/11/17	
170	Work with installers to ensure they do quality installations	2 days	Tue 7/11/17	Thu 7/13/17	
171	Establish RMA process	4 hrs	Tue 7/11/17	Tue 7/11/17	

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EXHIBIT E. Proposed Project Schedule
(To be modified by the Parties)

ID	Los Alamos County AMI Deployemt	Duration	Start	Finish	B
172	Discuss process to get daily reports on units installed to load into RNI	1 hr	Tue 7/11/17	Tue 7/11/17	
173	Discuss installers responsibility for good installs	1 hr	Tue 7/11/17	Tue 7/11/17	
174	Discuss Sensus QA with installers	1 hr	Tue 7/11/17	Tue 7/11/17	
175	**Endpoint Installation Phase 1 Meters**	**7 days**	**Mon 7/17/17**	**Tue 7/25/17**	
176	Meter Installation	5 days	Wed 7/12/17	Wed 7/19/17	
177	Optimize Phase 1 Installation	7 days	Wed 7/19/17	Fri 7/28/17	
178	**AMI Phase 1 Infrastructure Installation Complete**	0 days	Fri 7/28/17	Fri 7/28/17	
179	**Begin Phase 1 SAT Testing**	5 mons	Mon 5/1/17	Fri 9/15/17	
180	**Phase 1 SAT Testing Complete**	**1 day**	**Fri 9/15/17**	**Fri 9/15/17**	
181	**Review Phase 1Test Results and Refine Project as Required**	5 days	Mon 9/18/17	Fri 9/22/17	
182	**Notice to Proceed Full Deployment**	0 days	Fri 9/22/17	Fri 9/22/17	
183	**Full Deployment Deployment**	**240 days**	**Mon 9/25/17**	**Fri 8/24/18**	
184	**CMI Installation Management Systems**	**5 days**	**Mon 9/25/17**	**Fri 9/29/17**	
185	CMI Installs Work Order Management System	2 days	Mon 9/25/17	Tue 9/26/17	
186	CMI Loads Test Electric / Water Meter / Gas Module Test File	1 day	Wed 9/27/17	Wed 9/27/17	
187	Meter Data Management Life Cycle Transaction file loaded into RNI	1 day	Thu 9/28/17	Thu 9/28/17	
188	MDMIF Interface Testing Complete	1 day	Fri 9/29/17	Fri 9/29/17	
189	**Full Deployment Endpoint Installation**	**213 days**	**Tue 10/31/17**	**Thu 8/23/18**	
190	Route Planning / Blackout Schedule Complete	2 days	Wed 10/18/17	Thu 10/19/17	
191	**Contract Meter Installer Begins Installation Phase**	**210 days**	**Fri 11/3/17**	**Thu 8/23/18**	
192	CMI Installs all Endpoints	180 days	Mon 10/23/17	Fri 6/29/18	
193	**System Optimization Phase**	**180 days**	**Mon 10/23/17**	**Fri 6/29/18**	
194	Evaluate Network Performance	180 days	Mon 10/23/17	Fri 6/29/18	
195	Change any non-performing endpoints	180 days	Mon 10/23/17	Fri 6/29/18	
196	Re-program endpoints to more aggressive transmit modes as required	180 days	Mon 10/23/17	Fri 6/29/18	
197	Ensure all endpoints are heard under the FlexNet RF umbrella	180 days	Mon 10/23/17	Fri 6/29/18	
198	**Full Deployment Installation Complete**	**0 days**	**Fri 6/29/18**	**Fri 6/29/18**	
199	**Project Complete and Close -out**	**1.75 days**	Fri 6/29/18	**Mon 7/2/18**	
200	Gather all project information	6 hrs	Fri 6/29/18	Fri 6/29/18	
201	Turn over documentation	2 hrs	Fri 6/29/18	Fri 6/29/18	
202	Hold close-out meeting with customer	6 hrs	Mon 7/2/18	Mon 7/2/18	
203	Notify project team that project has completed	0 days	Mon 7/2/18	Mon 7/2/18	
204	**Turn Over to Operations**	0 days	Mon 7/2/18	Mon 7/2/18	

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Exhibit F. System Acceptance Test Requirements (D1. Electrical, D2. Water System, and D3. Gas System Acceptance Test Plans)

ATTACHMENT A

Sensus USA

LOS ALAMOS COUNTY

AMI System Acceptance Test - Electric

Acceptance Criteria

Version: Draft

Revision History

Date	Version	Author(s)	Comments
12/25/16	0.1	Wayne Schmieder	Initial draft

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ATTACHMENT A

1. Overview

Los Alamos County shall deploy the Test Equipment and shall deploy 332 Electric meters ("Electric Test Meters"), in the White Rock community service territory (collectively, the "Electric Deployment").

The Electric Acceptance Test shall consist of the following subtests:

- EA-1: Communication: Daily Register Read Success
- EA-2: Communication: Daily Interval Read Success
- EA-3: Communication: 72 Hour Interval Read Success
- EA-4: Communication: 30 Day Interval Read Success
- EA-5: Last Gasp Performance
- EA-6: Restoration Performance
- EA-7: Measurement (Time Synchronization)
- EA-8: Measurement (Remote Read Accuracy)
- EA-9: Firmware Upgradeability
- EA-10: Meter Configuration
- EA-11: Operational Data Collection Accuracy
- EA-12: Disconnect
- EA-13: Reconnect

Upon satisfactory completion of each of the above tests, the AMI System will be deemed to have passed the Electric Acceptance Test. Each test is described in detail in section 5 below.

2. Pre Conditions

Testing can commence a minimum of fifteen (15) days after the below conditions are met.
- The entire network infrastructure is in place and Sensus certified.
- The Electric Meter Deployment is complete.
- Los Alamos County has sent written notice to Sensus after the Electric Deployment is complete.
  o   Such notice shall indicate the date on which the Electric Deployment is completed.

3. Assumptions

- For purposes of clarity, the Acceptance Tests shall only be conducted on Electric Test Meters as defined above, and Electric Test Meters shall only include deployed and available Electric Meters.
- Los Alamos County has the right to waive any of the tests listed in the document for any reason, including previous evidence of success criteria being met.
- When non Sensus tools are utilized to confirm the achieved success criteria, Sensus has the right to validate the data used by those tools against that data that resides in the Sensus RNI database.

4. Timeframe

- Testing can commence as soon as the Pre Conditions listed in section 2 are satisfied.
- In general, an attempt should be made to complete tests within thirty (30) days after commencement.
    - o Note: Some tests require a wait period to gather the required data to accurately perform the test and will therefore, exceed 30 days.
    - o See "Pre Conditions" section of each acceptance test in section 5 for test specific pre conditions.

5. Acceptance Tests

5.1 EA-1: Communication – Daily Register Read Success

5.1.1 Overview

This test will determine the percentage of register reads collected by the AMI System over a 24 hour period.

5.1.2 Pre Conditions

- This test can commence twenty four (24) hours after the Pre Conditions listed in section 2 are satisfied.
- CMEP interface between Sensus RNI and Logic MDMS must be functional.

5.1.3 Duration

This test will be run daily for 30 contiguous days.

5.1.4 Test Method

Logic MDMS **AMI Service Level Report** will be utilized.

- This report will be configured to show the percentage of all Electric meter register readings delivered to Logic from the RNI via the CMEP interface in the previous twenty four (24) hours
- A separate spreadsheet should be maintained in order to document the daily "Achieved Service Level" every day for 30 days.
- This report can be scheduled or run manually, see Appendix A for details.

Figure 1: [EA-1] Logic Daily Register Read Report Success Results

Register Reads

Excel | PDF | Schedule | Save

Time Frame	Report Date ⬇	Expected Reads	Available Reads	Required Service Level (%)	Achieved Service Level (%)	RESULT
24 Hours ago	20130522	329	328	98	99.7	✓ Pass

ATTACHMENT A

5.1.5 Success Criteria

98% or greater based on the documented daily "Achieved Service Level (%)"averaged over 30 contiguous days. (see Figure 2)

5.1.6 Notes

- Only meters that have been synced between Logic and Cayenta systems are included in this test.

5.2 EA-2: Communications – Daily Interval Read Success

5.2.1 Overview

This test will determine the percentage of interval reads collected by the AMI System over a 24 hour period.

5.2.2 Pre Conditions

- This test can commence twenty four (24) hours after the Pre Conditions listed in section 2 are satisfied.
- CMEP interface between Sensus RNI and Logic MDMS must be functional.

5.2.3 Duration

This test will be run daily for 30 contiguous days.

5.2.4 Test Method

Logic MDMS **AMI Service Level Report** will be utilized.

- This report will be configured to show the percentage of all Electric meter interval readings delivered to Logic from the RNI via the CMEP interface in the previous twenty four (24) hours
- A separate spreadsheet should be maintained in order to document the daily "Achieved Service Level" every day for 30 days.
- This report can be scheduled or run manually, see Appendix A for details.

Figure 2: [EA-2] Logic Daily Interval Read Report Results

Interval Reads

Excel   PDF   Schedule   Save

Time Frame	Report Date ↓	Expected Reads	Available Reads	Required Service Level (%)	Achieved Service Level (%)	RESULT
24 Hours ago	20130522	31584	30816	98	98.63	✔ Pass

5.2.5 Success Criteria

99.5% or greater based on the documented daily "Achieved Service Level (%)"averaged over 30 contiguous days. (see Figure 4)

ATTACHMENT A

5.2.6 Notes

- Only meters that have been synced between Logic and Cayenta systems are included in this test.

5.3 EA-3: Communication – 72 Hour Interval Read Success

5.3.1 Overview

This test will determine the percentage of reads collected by the AMI System over a rolling 72 hours.

5.3.2 Pre Conditions

- This test can commence seventy two (72) hours after the Pre Conditions listed in section 2 are satisfied.
- CMEP interface between Sensus RNI and Logic MDMS must be functional.

5.3.3 Duration

This test will be run daily for 27 contiguous days.

5.3.4 Test Method

Logic MDMS **AMI Service Level Report** will be utilized.

- This report will be configured to show the percentage of all Electric meter readings for a rolling 72 hours based on interval reads delivered to Logic from the RNI via the CMEP interface.
- A separate spreadsheet should be maintained in order to document the daily "Achieved Service Level" every day for 27 days.
- This report can be scheduled or run manually, see Appendix A for details.

Figure 3: [EA-3] Logic 72 hour Interval Report Results

Interval Reads

Excel | PDF | Schedule | Save

Time Frame	Report Date ↓	Expected Reads	Available Reads	Required Service Level (%)	Achieved Service Level (%)	RESULT
72 Hours ago	20130519	126336	125280	99	99.16	Pass

5.3.5 Success Criteria

99.5% or greater based on the documented daily "Achieved Service Level (%)"averaged over 27 contiguous days.

5.3.6 Notes

- Only meters that have been synced between Logic and Cayenta systems are included in this test.

5.4 EA-4: Communication – 30 Day Interval Read Success

5.4.1 Overview

This test will determine the percentage of interval reads collected by the AMI System over a rolling 30 days.

5.4.2 Pre Conditions

- This test can commence thirty (30) days after the Pre Conditions listed in section 2 are satisfied.
- CMEP interface between Sensus RNI and Logic MDMS must be functional.

5.4.3 Duration
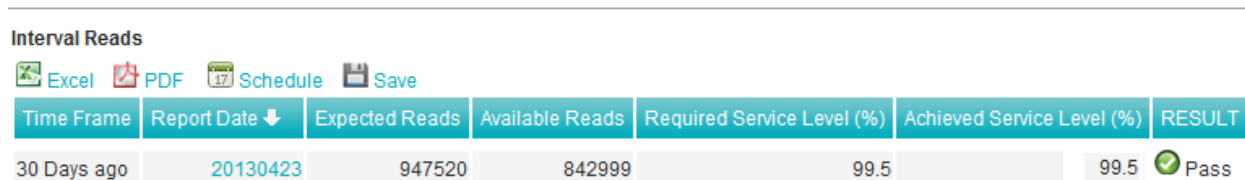
This test will be run daily for 15 contiguous days.

5.4.4 Test Method

Logic MDMS **AMI Service Level Report** will be utilized.

- This report will be configured to show the percentage of all Electric meter readings for a rolling 30 days based on interval reads delivered to Logic from the RNI via the CMEP interface.
- A separate spreadsheet should be maintained in order to document the daily "Achieved Service Level" every day for 15 days.
- This report can be scheduled or run manually, see Appendix A for details.

Figure 4: [EA-4] Logic 30 day Interval Read Report Results

Interval Reads

Excel   PDF   Schedule   Save

Time Frame	Report Date ⬇	Expected Reads	Available Reads	Required Service Level (%)	Achieved Service Level (%)	RESULT
30 Days ago	20130423	947520	842999	99.5	99.5	✅ Pass

5.4.5 Success Criteria

99.5% or greater based on the documented daily "Achieved Service Level (%)"averaged over 15 contiguous days.

5.4.6 Notes

- Only meters that have been synced between Logic and Cayenta systems are included in this test.

5.5 EA-5: Last Gasp Performance

5.5.1 Overview

This test will determine the communication success rate of last gasp messages within the network.

5.5.2 Pre Conditions

- Pre Conditions listed in section 2 are satisfied.
- The Electricity Test Meters must be configured to transmit alarm messages in the priority channel only.
    - No other devices shall be utilizing this channel or communications (including, without limitation, no boost mode communication for water or gas Smart Point modules).
- Los Alamos County must select how many meters to use in performing this test; from 1-500.

5.5.3 Duration

- If the test is run using more than one hundred meters, the test will be run once.
- If the test is run using ten to one hundred meters, the test will be run twice.
- If the test is run using one to nine meters, the test will be run twenty times.

5.5.4 Test Method

Once meters are selected to be a part of this test, perform planned outage. Verify power failure messages were sent to the RNI via the RNI Web in Reports/Outage Report.

Figure 5: [EA-5] RNI Web Outage Report (Power Fail)

Outage Report

Showing items 1 - 20 of 1057   Last Updated: Tuesday, May 28, 2013 10:25:14 AM

FlexNet ID	Power Restore	Power Fail
49748814	05/01/13	05/01/13
2942717	05/01/13	05/01/13
49751050	05/01/13	05/01/13
49748924	05/01/13	05/01/13
49748110	05/01/13	05/01/13
49748096	05/01/13	05/01/13
49748924	05/01/13	05/01/13

5.5.5 Success Criteria

Table 1: [EA- 5] Power Fail Success Criteria

Success criteria is based on the number of meters selected for the test as seen below.

Number of meters affected by Power Failures ("Outage Event") Under a Single FlexNet Base Station	1-100	101-250	251-500
Expected Success Rate	90%	85%	75%

5.5.6 Notes
- The test can be completed in a meter shop or test/sandbox environment due to the sensitive nature of planned outages.
- Los Alamos County has the right to waive this test for any reason, including previous evidence of success criteria being met.

5.6 EA-6: Restoration Performance

5.6.1 Overview
This test will determine the communication success rate of restoration events within the network.

5.6.2 Pre Conditions
- Pre Conditions listed in section 2 are satisfied.
- The Electricity Test Meters must be configured to transmit alarm messages in the priority channel only.
  - No other devices shall be utilizing this channel or communications (including, without limitation, no boost mode communication for water or gas SmartPoint modules).

5.6.3 Duration
- If the test is run using more than one hundred meters, the test will be run once.
- If the test is run using ten to one hundred meters, the test will be run twice.
- If the test is run using one to nine meters, the test will be run twenty times.

5.6.4 Test Method
- Once meters are selected to be a part of this test, perform planned restoral. Verify power restore messages were sent to the RNI via the RNI Web in Reports/Outage Report.
- The test can be completed in a meter shop or test/sandbox environment due to the sensitive nature of planned outages.

Figure 6: [EA-6] RNI Web Outage Report (Power Restore)

5.6.5 Success Criteria

Success criteria is based on the number of meters selected for the test as seen below.

Table 2: [EA- 6] Power Restore Success Criteria

Number of meters affected by Power Restoration ("Restoration Event") Under a Single FlexNet Base Station	1-100	101-250	251-500
Expected Success Rate	90%	85%	75%

5.6.6 Notes

Los Alamos County has the right to waive this test for any reason, including previous evidence of success criteria being met.

5.7 EA-7: Measurement (Time Synchronization)

5.7.1 Overview

This test will determine if the meter is synchronized to the time standard.

5.7.2 Pre Conditions

- Pre Conditions listed in section 2 are satisfied.
- The installation of one (1) AMI electricity meter at a residence or lab setting that has not been subject to a power failure in the last fifteen (15) minutes ("Time Test Meter").
- The Time Test Meter will be configured to display local time on the LCD.
- The local time will be compared to a mutually agreed standard time ("Standard Time").

ATTACHMENT A

5.7.3 Duration

This test should be completed within thirty (30) days after the Pre Conditions listed in section 2 are satisfied.

5.7.4 Test Method

Compare the displayed local time of the LCD on the test meter with the agreed upon tool that represents Standard Time. One option is to use: http://www.time.gov which will show the "official US Time.

Figure 7: [EA-7] Official US Time via time.gov

5.7.5 Success Criteria

The time displayed on the Time Test Meter is synchronized to the agreed upon tool that represents Standard Time to a tolerance of 60 seconds or less (+/-).

5.7.6 Notes

N/A

5.8 EA-8 Measurement (Remote Read Accuracy)

5.8.1 Overview

This test will compare the time stamp at the meter with the time received in the RNI software to confirm accuracy of time stamps being used during validation, and therefore for billing purposes.

5.8.2 Pre Conditions

- Pre Conditions listed in section 2 are satisfied.
- The installation and selection of one AMI Electric meter at a residence or lab setting.
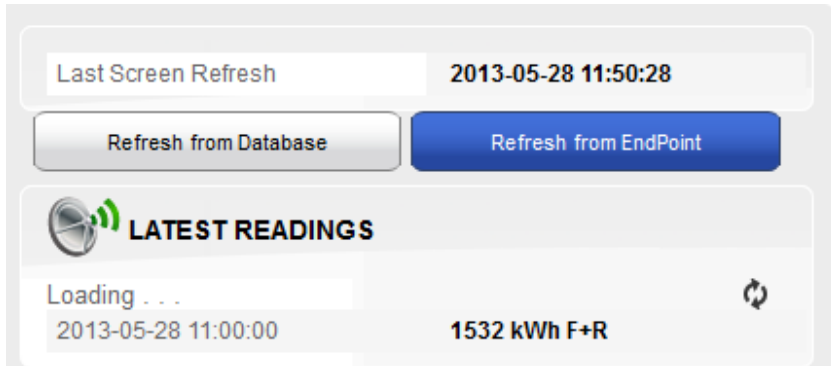
5.8.3 Duration

This test should be completed within thirty (30) days after the Pre Conditions listed in section 2 are satisfied.

5.8.4 Test Method

Coordinate the physical reading of the selected meter with the demand read via the RNI. To capture the demand read value and timestamp, for the selected meter, navigate to the IMIP page of the RNI and perform an on demand read via the "Refresh from Endpoint" button.
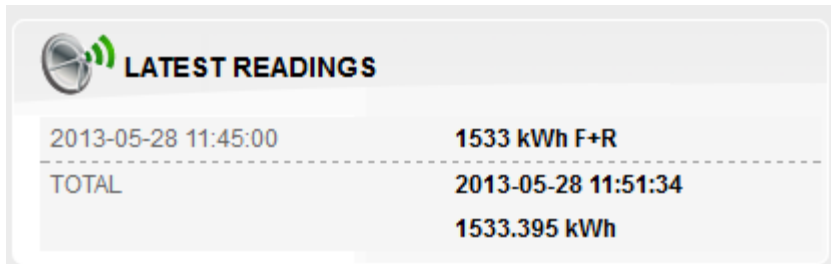
Figure 8: [EA-8] RNI Web Remote Read - Refresh from Endpoint

Once complete, the RNI will provide a status message. At this point, you will see the latest read value and timestamp.

Figure 9: [EA-8] RNI Web Remote Read - Refresh from Endpoint Results

5.8.5 Success Criteria

The data acquired through a manual read of the LCD kWh register differs from the data presented by an on-demand read taken at the same time by equal or less than +/-0.1%.

5.8.6 Notes

The physical read and on-demand read must be obtained simultaneously.

5.9 EA-9: Firmware Upgradability

5.9.1 Overview

This test serves to document the ability of the network to perform firmware upgrades to the SmartPoint Modules and FlexNet Base Stations in the field.

5.9.2 Pre Conditions

- Pre Conditions listed in section 2 are satisfied.
- The installation of one (1) AMI electricity meter ("Download Meter") at residence or in lab setting and the installation of one (1) FlexNet Base Station ("Download Base Station"), preferably in a test environment to avoid production interruption.
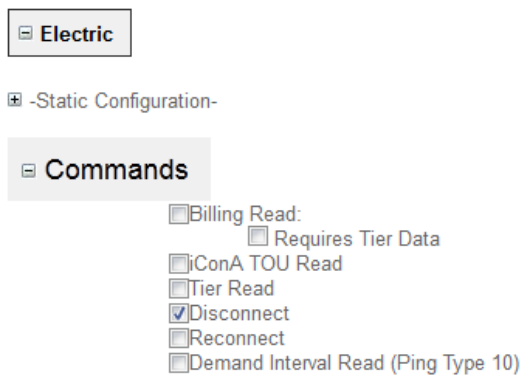
5.9.3 Duration

- This test should be completed within thirty (30) days after the Pre Conditions listed in section 2 are satisfied.
- Los Alamos County shall complete this test upon receipt of an update or purchased upgrade.
    - If no such update is released or upgrade is purchased, Sensus shall take commercially reasonable steps to provide Los Alamos County with software to complete this test script.

5.9.4 Test Method

This section left intentionally blank. Please consult with Sensus personnel.

5.9.5 Success Criteria

The Download Material is received by the Download Meter and the Download Base Station, as evidenced in the RNI.

5.9.6 Notes

- Los Alamos County has the right to waive this test as Sensus has previously demonstrated success criteria with previous firmware upgrade.
- If test is not waived, then this test should be:
    - Led by trained Sensus personnel with Los Alamos County supervision.
    - Completed on a meter installed in a lab environment and not at a customer site.

5.10 EA-10: Meter Configuration

5.10.1 Overview

This test serves to document the ability of the network to configure individual meter parameters on-air.

5.10.2 Pre Conditions

- Pre Conditions listed in section 2 are satisfied.

ATTACHMENT A

- The installation of ten (10) iCon A electricity meters ("Configuration Meters") at residence or in lab setting.

5.10.3 Duration

This test should be completed within thirty (30) days after the Pre Conditions listed in section 2 are satisfied.

5.10.4 Test Method

Navigate to the Administration/Reprogramming page in the RNI Web. Update the static configuration to pre-determined values for this test.

Figure 10: [EA-10] RNI Web Electric Static Configuration

Copy the ten (10) iCon A electricity meter id's into the text area seen below and click "Process Changes"

Figure 11: [EA-10] RNI Web Electric Static Configuration Submission

After submission, you will be presented with a Batch ID. Navigate to Reports/Show Batches and click on the Batch ID and select "View Batch Details" for results.

5.10.5 Success Criteria

The AMI network should provide adequate configuration functions so that the following settings can be changed on-air:

- Static Configuration (transmit mode, read interval, transmit rate)
- Power Quality (Outage hold off time, restoral hold off time, momentary time, low voltage threshold, voltage averaging window).

The selected configuration changes made are received by nine of the configuration meters and as evidenced in the RNI.

5.10.6 Notes

N/A

5.11 EA-11: Operational Data Collection Accuracy

5.11.1 Overview

This test serves to document the ability of the network to collect accurate operational data from AMI Electric modules. The AMI network should collect operational data from available AMI Electric modules on a regular basis to assist Los Alamos County in managing various aspects of their distribution network.

5.11.2 Pre Conditions

- Pre Conditions listed in section 2 are satisfied.
- The installation of one (1) AMI electricity meter ("Operational Test Meter") configured with required alarms enabled at residence or in lab setting.

5.11.3 Duration

This test should be completed within thirty (30) days after the Pre Conditions listed in section 2 are satisfied.

5.11.4 Test Method

Verify Los Alamos County induced meter events in the RNI via Reports/Event Log after:

- Los Alamos County will induce an excursion event that exceeds the configured voltage alarm setting
- Los Alamos County will induce a tamper event (meter removal from socket)
- Los Alamos County will induce a theft event (uni-directional meter installed upside down in a meter socket)
- Los Alamos County will apply voltage to the meter of 110%, 100% and 90% of standard operating voltages.

Figure 12: [EA-11] RNI Web Event Log

Event Log

Showing items 1 – 3 of 3   Last Updated: Tuesday, May 28, 2013 2:44:40 PM

Event Description	Icons	Date/Time
Meter Tamper	🟨	05/22/2013 08:46:57
Meter Tamper	🟨	05/22/2013 22:42:11
Meter Tamper	🟨	05/28/2013 09:05:30

Records Per Page 20 ▾   first   prev   1 >   next   last

To verify the Instantaneous voltage readings, the meter will need to be pinged with FlexNet Utility (Alarm Ping 5) and that voltage data returned will need to be compared to calibrated test equipment.

Figure 13: [EA-11] FNU Alarm Ping Voltage Readings Results

5.11.5

5.11.6 Success Criteria

The AMI network will successfully detect the following alarms based on Los Alamos County induced events:

- Voltage Alarm received by the Operational Test Meter during the Voltage Test
- Tamper Alarm received by AMI system during induced tamper event
- Theft Alarm received by AMI system during induced theft event

Instantaneous voltage readings are equal or less than +/-5% of actual field measurement (using calibrated equipment)

5.11.7 Notes

- Los Alamos County meters are not setup to transmit a reverse energy flow error flag.
- Los Alamos County is measuring Forward + Reverse energy flow.
- The test for a theft event will be to remove a meter and install it upside down and verify through on demand pings that the meter still measures forward.

5.12 EA-12: Disconnect

5.12.1 Overview

The Disconnect test is used to determine if Sensus' disconnect meters operate as designed. This test shall be performed on twenty (20) meters that have remote disconnect capability ("Disconnect Meters").

5.12.2 Pre Conditions

- Pre Conditions listed in section 2 are satisfied.

ATTACHMENT A

- The installation of twenty AMI electricity meters at residence or in lab setting.

5.12.3 Duration

This test should be completed within thirty (30) days after the Pre Conditions listed in section 2 are satisfied.

5.12.4 Test Method

Navigate to the Administration/Reprogramming page in the RNI Web. Go to the Electric/Commands section and select "Disconnect"

Figure 14: [EA-12] RNI Web Electric Disconnect
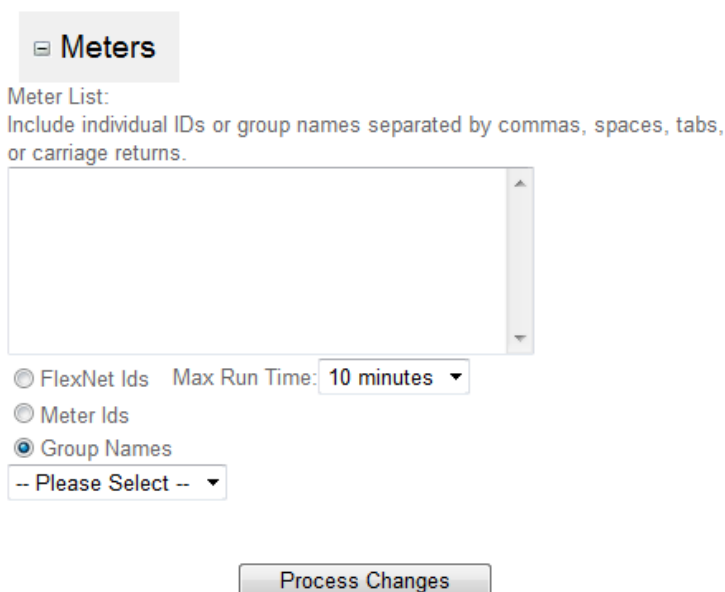
Copy the twenty (20) iCon A electricity meter id's into the text area seen below and click "Process Changes".

Figure 15: [EA-12] RNI Web Electric Disconnect Submission

ATTACHMENT A

After submission, you will be presented with a Batch ID. Navigate to Reports/Show Batches and click on the Batch ID and select "View Batch Details" for results.

5.12.5 Success Criteria

- The RNI/FlexWare Software shows the meter with a status of Disconnected for at least nineteen (19) Disconnect Meters.
- Los Alamos County confirms that the power is off for at least nineteen (19) Disconnect Meters (in the field or on the bench).

5.12.6 Notes

N/A

5.13 EA-13: Reconnect

5.13.1 Overview

The Reconnect test is used to determine if Sensus' disconnect meters operate as designed. This test shall be performed on the same twenty (20) Disconnect Meters defined in the above Disconnect test. For purposes of this test, they shall be referred to as "Reconnect Meters".

5.13.2 Pre Conditions

- Pre Conditions listed in section 2 are satisfied.
- The installation of Disconnect Meters and completion of the above Disconnect test.
- Prior to commencing the test, Los Alamos County shall confirm that no load is applied on the meter while in a disconnected state.

5.13.3 Duration

This test should be completed within thirty (30) days after the Pre Conditions listed in section 2 are satisfied.

5.13.4 Test Method

Navigate to the Administration/Reprogramming page in the RNI Web. Go to the Electric/Commands section and select "Reconnect"

Figure 16: [EA-13] RNI Web Electric Reconnect

Copy the twenty (20) iCon A electricity meter id's into the text area seen below and click "Process Changes".

Figure 17: [EA-13] RNI Web Electric Reconnect Submission

After submission, you will be presented with a Batch ID. Navigate to Reports/Show Batches and click on the Batch ID and select "View Batch Details" for results.

5.13.5 Success Criteria

- The RNI/FlexWare Software shows the meter with a status of Connected for at least nineteen (19) Reconnect Meters.
- Los Alamos County confirms that the power is on for at least nineteen (19) Reconnect Meters (in the field or on the bench).

5.13.6 Notes

N/A

6. Appendix A

Running the AMI Service Level Report

The AMI Service Level Report can be scheduled or run manually.
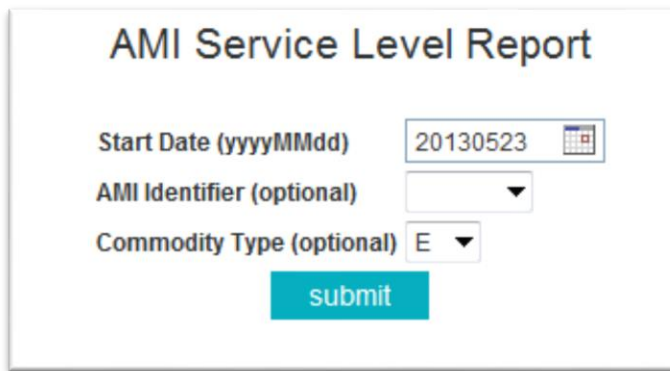
If scheduled, this job will:

- Need to run after all CMEP data has been delivered and processed by Logic
  - o The "Start Date" parameter should be set to set to the current day
- Report on all data received for the (current day - 1)

If run during the day:

- The "Start Date" parameter should be set to set to (current day - 1)
- This job will report on all data received for the (current day - 2)

Figure 18: Appendix A - AMI Service Level Report Operation

AMI Service Level Report

Start Date (yyyyMMdd)   20130523
AMI Identifier (optional)
Commodity Type (optional) E

submit

ATTACHMENT A

7. Mutual Acceptance Agreement

This document and test methods provided within, have been reviewed and accepted by both parties. Upon satisfactory completion of each of the tests below, the AMI System will be deemed to have passed the Electric Acceptance Test.

Table 3: Mutual Acceptance Agreement

Acceptance Tests	Los Alamos County	Sensus	Date
EA-1: Communication: Daily Register Read Success			
EA-2: Communication: Daily Interval Read Success			
EA-3: Communication: 72 Hour Interval Read Success			
EA-4: Communication: 30 Day Interval Read Success			
EA-5: Last Gasp Performance			
EA-6: Restoration Performance			
EA-7: Measurement (Time Synchronization)			
EA-8: Measurement (Remote Read Accuracy)			
EA-9: Firmware Upgradeability			
EA-10: Meter Configuration			
EA-11: Operational Data Collection Accuracy			
EA-12: Disconnect (if applicable)			
EA-13: Reconnect (if applicable)			
Final Approval			

SENSUS

Sensus USA

Los Alamos County

AMI System Acceptance Test - Water

Acceptance Criteria

Version: 0.2

Revision History

Date	Version	Author(s)	Comments
1/26/16	0.1	Wayne Schmieder	Initial draft

EXHIBIT F2. Water SAT

Table of Contents

List of Figures

1. Overview

After the Effective Date, Los Alamos County shall deploy the Test Equipment and 332 water meters and or Water Smart Points ("Water Test Meters"), in White Rock community service territory (collectively, the "Water Deployment").

The Water Acceptance Test shall consist of the following subtests:

- WA-1: Communication: 72 Hour Interval Read Success
- WA-2: Communication: Time Required for Reading (On-Demand)
- WA-3: Measurement (Remote Read Accuracy)
- WA-4: Operational Data Collection Accuracy

Upon satisfactory completion of each of the above tests, the AMI System will be deemed to have passed the Water Acceptance Test. Each test is described in detail in section 5 below.

2. Pre Conditions
- The entire network infrastructure is in place and Sensus certified.
- The Water Meter Deployment is complete.
- Los Alamos County shall send written notice to Sensus after the Water Deployment is complete so that communication testing can begin.
    o   Such notice shall indicate the date on which the Water Deployment is completed.

3. Assumptions
- For purposes of clarity, the Acceptance Tests shall only be conducted on Water Test Meters as defined above, and Water Test Meters shall only include deployed and available Water Meters.
- Los Alamos County has the right to waive any of the tests listed in the document for any reason, including previous evidence of success criteria being met.
- When non Sensus tools are utilized to confirm the achieved success criteria, Sensus has the right to validate the data used by those tools against that data that resides in the Sensus RNI database.

4. Timeframe
- Testing can commence as soon as the Pre Conditions listed in section 2 are satisfied.
- In general, an attempt should be made to complete tests within thirty (30) days after commencement.
    o   Note: Some tests require a wait period to gather the required data to accurately perform the test:
        - Test WA-1 requires a minimum of 72 hours to pass after the completion of the Water deployment, in order to accurately calculate the 72 hour interval read success.
        - Tests WA-2, WA-3, and WA-4 can start any time after Water deployment has been completed.

ATTACHMENT A

5. Acceptance Tests

5.1 WA-1: Communication

5.1.1 Overview
This test will determine the percentage of reads collected by the AMI System over a rolling 72 hours.

5.1.2 Pre Conditions
- This test can commence seventy two (72) hours after the Pre Conditions listed in section 2 are satisfied.
- CMEP interface between Sensus RNI and MeterSense MDMS must be functional.

5.1.3 Duration
This test will be run daily for 26 contiguous days.

5.1.4 Test Method
MeterSense MDMS **AMI Service Level Report** will be utilized.

- This report will be configured to show the percentage of all Water meter readings for a rolling 72 hours based on interval reads delivered to MeterSense from the RNI via the CMEP interface.
- A separate spreadsheet should be maintained in order to document the daily "Achieved Service Level" every day for 26 days.
- This report can be scheduled or run manually, see Appendix A for details.

Figure 1: [WA-1] AMI Service Level Report Results

Interval Reads

Excel PDF Schedule Save

Time Frame	Report Date ↓	Expected Reads	Available Reads	Required Service Level (%)	Achieved Service Level (%)	RESULT
96 Hours ago	20130519	126336	125280	99	99.16	Pass

5.1.5 Success Criteria
99.5% or greater based on the documented daily "Achieved Service Level (%)"averaged over 26 contiguous days. (See Figure 1)

5.1.6 Notes
Only meters that have been synced between MeterSense and Cayenta systems are included in this test.

5.2 WA-2: Communications – Time Required for Readings (On Demand)

5.2.1 Overview

This test will determine the amount of time required to obtain an on-demand reading from a Water meter for customer call issues. The time required to obtain readings will be important as it can affect the ability to provide customer service.

5.2.2 Pre Conditions

- This test can commence after the Pre Conditions listed in section 2 are satisfied.
- Los Alamos County will randomly select twenty (20) Water Meters that are in MoM (Middle of the Minute) mode to perform this test against.

5.2.3 Duration

This test should be started and completed within thirty (30) days after the Water Deployment is complete.

5.2.4 Test Method

For each of the twenty (20) selected meters, navigate to the Commands Tab in the RNI IMIP page and perform a Demand Read (Type 2).

Figure 2: [WA-2] Demand Read (Type 2) Command
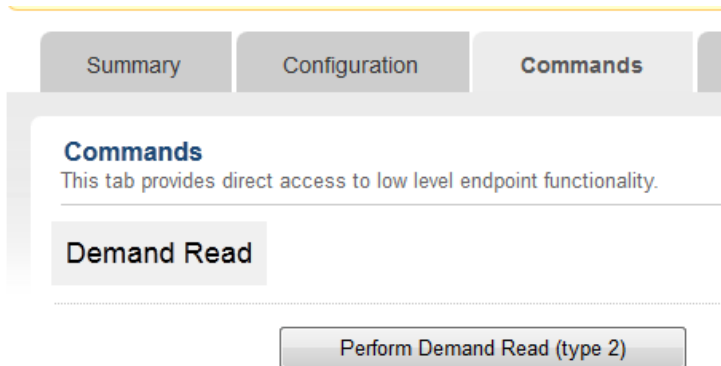
Once the RNI will provide a status message, navigate to the Request Tab to view the Request Start (Started At) and Completion (Last Update) times. Subtract the time difference between the two and document the results in a separate spreadsheet. Repeat this process for each of the remaining meters.

Figure 3: [WA-2] Demand Read Time Comparison Results
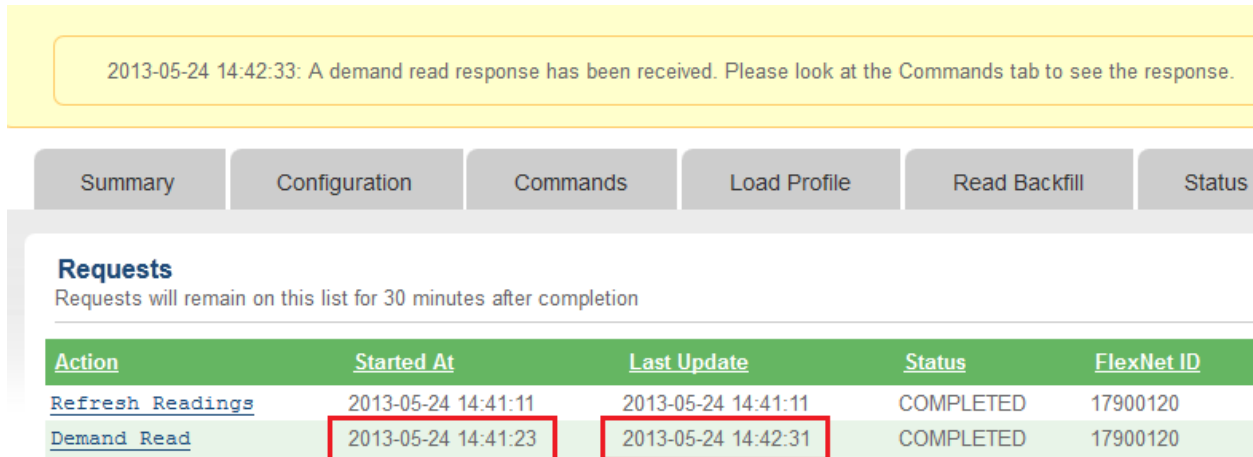
5.2.5 Success Criteria

The average On Demand read time for twenty randomly selected water meters is less or equal to 300 seconds (5 minutes).

5.2.6 Notes

The Demand Read Type 2 should be used as this will provide the "on the glass" reading value and timestamp.

5.3 WA-3 Measurement (Remote Read Accuracy)

5.3.1 Overview

This test will compare the time stamp at the SmartPoint Module, with that determined through the RNI software to confirm accuracy of time stamps being used during validation, and therefore for billing purposes.

5.3.2 Pre Conditions

- This test can commence after the Pre Conditions listed in section 2 are satisfied.
- The installation and selection of one AMI water meter at a residence or lab setting.

5.3.3 Duration

This test should be started and completed within thirty (30) days after the Water Deployment is complete.

5.3.4 Test Method

Coordinate the physical reading of the selected meter with the demand read via the RNI. To capture the demand read value and timestamp, for a selected meter, navigate to the Commands Tab in the IMIP page of the RNI and perform a Demand Read (Type 2).

ATTACHMENT A

Figure 4: [WA-3] Demand Read (Type 2) Command

Once complete, the RNI will provide a status message. At this point, navigate to Commands Tab to view the read value and timestamp.

Figure 5: [WA-3] Demand Read Results

5.3.5 Success Criteria

The data acquired through a manual read of the meter register differs from the data presented by an on-demand read taken at the same time by equal or less than +/-0.1% (resolution dependent).

5.3.6 Notes
- The physical read and on-demand read must be obtained simultaneously.
- The Demand Read Type 2 should be used as this will provide the "on the glass" reading value and timestamp.

5.4 WA-4: Operational Data Collection Accuracy

5.4.1 Overview

This test serves to document the ability of the network to collect accurate operational data from AMI water modules. The AMI network should collect operational data from available AMI water modules on a regular basis to assist Los Alamos County in managing various aspects of their distribution network.

5.4.2 Pre Conditions
- This test can commence after the Pre Conditions listed in section 2 are satisfied.

- The installation of twenty (20) AMI water meters ("Operational Test Meters") at residence or in lab setting.

5.4.3 Duration

This test should be started and completed within thirty (30) days after the Water Deployment is complete.

5.4.4 Test Method

Verify Los Alamos County induced meter events in the RNI via Reports/Event Log.

Figure 6: [WA-4] Event Log

Event Log

Showing items 1 - 20 of 907   Last Updated: Friday, May 24, 2013 2:42:01 PM

Event Description	Icons	Date/Time	Meter ID
Leak Detected		05/23/2013 08:26:18	71952432
Leak Detected		05/22/2013 10:00:01	71952432
Leak Detected		05/22/2013 10:00:03	71952432

5.4.5 Success Criteria

1. The AMI network will successfully detect the following alarms based on Los Alamos County induced events on twenty (20) AMI water meters:
   - Backflow
   - Meter read failure (cut wire, tamper will produce this alarm)
   - Broken pipe
   - Low battery
2. Meter read failure Alarm received by at least nineteen Operational Test Meters during induced cut wire event.
3. Meter read failure Alarm received by at least nineteen Operational Test Meters during induced tamper event.

5.4.6 Notes

Los Alamos County has the right to waive any of these tests based on previous evidence of success criteria being met.

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6. Appendix A

Running the AMI Service Level Report

The AMI Service Level Report can be scheduled or run manually.
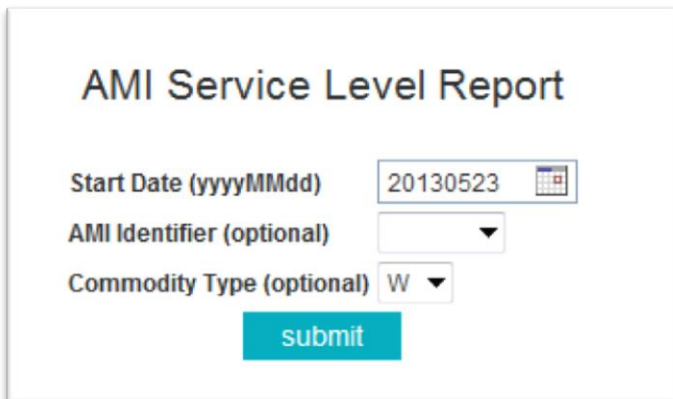
If scheduled, this job will:

- Need to run after all CMEP data has been delivered and processed by MeterSense
  - The "Start Date" parameter should be set to set to the current day
- Report on all data received for the (current day - 1)

If run during the day:

- The "Start Date" parameter should be set to set to (current day - 1)
- This job will report on all data received for the (current day - 2)

Figure 7: Appendix A - AMI Service Level Report Operation

7. Mutual Acceptance Agreement

This document and test methods provided within, have been reviewed and accepted by both parties. Upon satisfactory completion of each of the tests below, the AMI System will be deemed to have passed the Water Acceptance Test.

Acceptance Tests	Los Alamos County	Sensus	Date
WA-1: Communication: 72 Hour Interval Read Success			
WA-2: Communication: Time Required for Reading (On-Demand)			
WA-3: Measurement (Remote Read Accuracy)			
WA-4: Operational Data Collection Accuracy			
Final Approval			

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SENSUS

Sensus USA

Los Alamos County

AMI System Acceptance Test - Gas

Acceptance Criteria

Version: 0.2

Revision History

Date	Version	Author(s)	Comments
1/25/16	0.1	Wayne Schmieder	Initial draft

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List of Figures

1. Overview

After the Effective Date, Los Alamos County shall deploy the Test Equipment and shall deploy 332 gas meters and or Gas Smart Points ("Gas Test Meters"), in the White Rock community service territory (collectively, the "Gas Deployment").

The Gas Acceptance Test shall consist of the following subtests:

- GA-1: Communication: 72 Hour Interval Read Success
- GA-2: Communication: Time Required for Reading (On-Demand)
- GA-3: Measurement (Remote Read Accuracy)
- GA-4: Operational Data Collection Accuracy

Upon satisfactory completion of each of the above tests, the AMI System will be deemed to have passed the Gas Acceptance Test. Each test is described in detail in section 5 below.

2. Pre Conditions

- The entire network infrastructure is in place and Sensus certified.
- The Gas Meter Deployment is complete.
- Los Alamos County shall send written notice to Sensus after the Gas Deployment is complete so that communication testing can begin.
    - o Such notice shall indicate the date on which the Gas Deployment is completed.

3. Assumptions

- For purposes of clarity, the Acceptance Tests shall only be conducted on Gas Test Meters as defined above, and Gas Test Meters shall only include deployed and available Gas Meters.
- Los Alamos County has the right to waive any of the tests listed in the document for any reason, including previous evidence of success criteria being met.
- When non Sensus tools are utilized to confirm the achieved success criteria, Sensus has the right to validate the data used by those tools against that data that resides in the Sensus RNI database.

4. Timeframe

- Testing can commence as soon as the Pre Conditions listed in section 2 are satisfied.
- In general, an attempt should be made to complete tests within thirty (30) days after commencement.
    - o Note: Some tests require a wait period to gather the required data to accurately perform the test:
        - Test GA-1 requires a minimum of 72 hours to pass after the completion of the Gas deployment, in order to accurately calculate the 72 hour interval read success.
        - Tests GA-2, GA-3, and GA-4 can start any time after Gas deployment has been completed.

5. Acceptance Tests

5.1 GA-1: Communication

5.1.1 Overview

This test will determine the percentage of reads collected by the AMI System over a rolling 72 hours.

5.1.2 Pre Conditions

- This test can commence seventy two (72) hours after the Pre Conditions listed in section 2 are satisfied.
- CMEP interface between Sensus RNI and Logic MDMS must be functional.

5.1.3 Duration

This test will be run daily for 26 contiguous days.

5.1.4 Test Method

Logic MDMS **AMI Service Level Report** will be utilized.

- This report will be configured to show the percentage of all Gas meter readings for a rolling 72 hours based on interval reads delivered to Logic from the RNI via the CMEP interface.
- A separate spreadsheet should be maintained in order to document the daily "Achieved Service Level" every day for 26 days.
- This report can be scheduled or run manually, see Appendix A for details.

Figure 1: [GA-1] AMI Service Level Report Results

Interval Reads

📊 Excel   📄 PDF   📅 Schedule   💾 Save

Time Frame	Report Date ⬇	Expected Reads	Available Reads	Required Service Level (%)	Achieved Service Level (%)	RESULT
96 Hours ago	20130519	126336	125280	99	99.16 ✅ Pass	

5.1.5 Success Criteria

99.5% or greater based on the documented daily "Achieved Service Level (%)"averaged over 26 contiguous days. (See Figure 1)

5.1.6 Notes

- Only meters that have been synced between Logic and Cayenta systems are included in this test.

5.2 GA-2: Communications – Time Required for Readings (On Demand)

5.2.1 Overview

This test will determine the amount of time required to obtain an on-demand reading from a Gas meter for customer call issues. The time required to obtain readings will be important as it can affect the ability to provide customer service.

5.2.2 Pre Conditions

- This test can commence after the Pre Conditions listed in section 2 are satisfied.
- Los Alamos County will randomly select twenty (20) Gas Meters to perform this test against.

5.2.3 Duration

This test should be started and completed within thirty (30) days after the Gas Deployment is complete.

5.2.4 Test Method

For each of the twenty (20) selected meters, navigate to the Commands Tab in the RNI IMIP page and perform a Demand Read (Type 2).

Figure 2: [GA-2] Demand Read (Type 2) Command
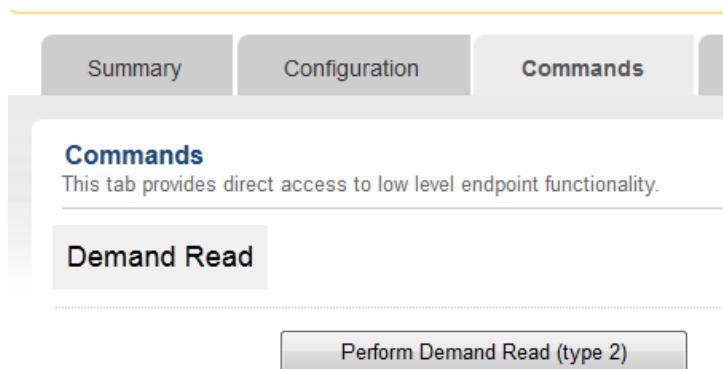
Once the RNI will provide a status message, navigate to the Request Tab to view the Request Start (Started At) and Completion (Last Update) times. Subtract the time difference between the two and document the results in a separate spreadsheet. Repeat this process for each of the remaining meters.

Figure 3: [GA-2] Demand Read Time Comparison Results
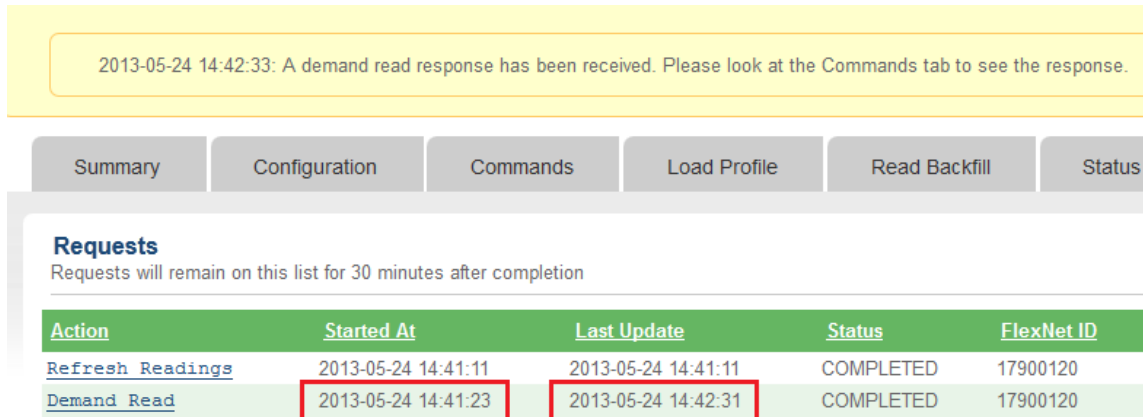
5.2.5 Success Criteria

The average On Demand read time for twenty randomly selected Gas meters is less or equal to 300 seconds (5 minutes).

5.2.6 Notes

The Demand Read Type 2 should be used as this will provide the "on the glass" reading value and timestamp.

5.3 GA-3 Measurement (Remote Read Accuracy)

5.3.1 Overview

This test will compare the time stamp at the SmartPoint Module, with that determined through the RNI software to confirm accuracy of time stamps being used during validation, and therefore for billing purposes.

5.3.2 Pre Conditions

- This test can commence after the Pre Conditions listed in section 2 are satisfied.
- The installation and selection of one AMI Gas meter at a residence or lab setting.
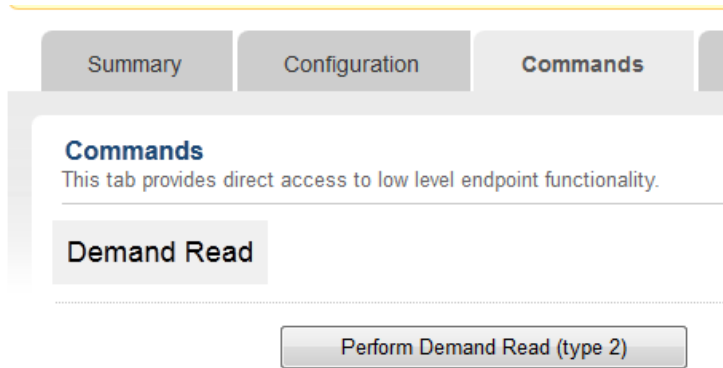
5.3.3 Duration

This test should be started and completed within thirty (30) days after the Gas Deployment is complete.

5.3.4 Test Method

Coordinate the physical reading of the selected meter with the demand read via the RNI. To capture the demand read value and timestamp, for a selected meter, navigate to the Commands Tab in the IMIP page of the RNI and perform a Demand Read (Type 2).

Once complete, the RNI will provide a status message. At this point, navigate to Commands Tab to view the read value and timestamp.

Figure 5: [GA-3   Demand Read Results

5.3.5 Success Criteria

The data acquired through a manual read of the meter register differs from the data presented by an on-demand read taken at the same time by equal or less than +/-0.1%.

5.3.6 Notes

- The physical read and on-demand read must be obtained simultaneously.
- The Demand Read Type 2 should be used as this will provide the "on the glass" reading value and timestamp.

5.4 GA-4: Operational Data Collection Accuracy

5.4.1 Overview

This test serves to document the ability of the network to collect accurate operational data from AMI Gas modules. The AMI network should collect operational data from available AMI Gas modules on a regular basis to assist Los Alamos County managing various aspects of their distribution network.

5.4.2 Pre Conditions

- This test can commence after the Pre Conditions listed in section 2 are satisfied.
- The installation of twenty (20) AMI Gas meters ("Operational Test Meters") at residence or in lab setting.

5.4.3 Duration

This test should be started and completed within thirty (30) days after the Gas Deployment is complete.

5.4.4 Test Method

Verify Los Alamos County induced meter events in the RNI via Reports/Event Log.

Figure 6: [GA-4] Event Log

Event Log

Showing items 1 - 20 of 128   Last Updated: Monday, May 27, 2013 7:13:06 PM

Event Description	Icons	Date/Time
Meter Tamper	☐	04/09/2013 15:48:23
Meter Tamper	☐	04/09/2013 16:08:34
Meter Tamper	☐	04/10/2013 09:21:38
Meter Tamper	☐	04/10/2013 09:39:46
Meter Tamper	☐	04/10/2013 09:42:51

5.4.5 Success Criteria

- The AMI network will successfully detect the following alarms based on Los Alamos County induced events on twenty (20) AMI Gas meters:
  - Tamper
  - Broken pipe
  - Low battery
- Tamper Alarm received by at least nineteen Operational Test Meters during induced tamper event.

5.4.6 Notes

Los Alamos County has the right to waive any of these tests based on previous evidence of success criteria being met.

6. Appendix A

Running the AMI Service Level Report

The AMI Service Level Report can be scheduled or run manually.
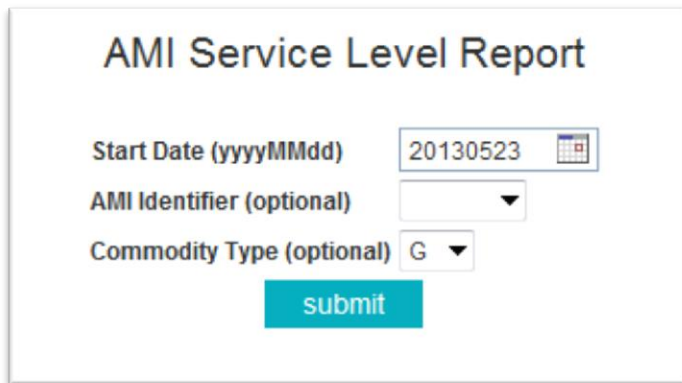
If scheduled, this job will:

- Need to run after all CMEP data has been delivered and processed by Logic
  - The "Start Date" parameter should be set to set to the current day
- Report on all data received for the (current day - 1)

If run during the day:

- The "Start Date" parameter should be set to set to (current day - 1)
- This job will report on all data received for the (current day - 2)

Figure 7: Appendix A - AMI Service Level Report Operation

ATTACHMENT A

7. Mutual Acceptance Agreement

This document and test methods provided within, have been reviewed and accepted by both parties. Upon satisfactory completion of each of the tests below, the AMI System will be deemed to have passed the Gas Acceptance Test.

Acceptance Tests	Los Alamos County	Sensus	Date
GA-1: Communication: 72 Hour Interval Read Success			
GA-2: Communication: Time Required for Reading (On-Demand)			
GA-3: Measurement (Remote Read Accuracy)			
GA-4: Operational Data Collection Accuracy			
Final Approval			

<u>Exhibit G. Warranty Documents</u>

ATTACHMENT A

Sensus Limited Warranty

1. General Product Coverage. Unless otherwise provided herein, Sensus USA Inc. ("Sensus") warrants its products and parts to be free from defects in material and workmanship for one (1) year from the date of Sensus shipment and as set forth below. All products are sold to customer ("Customer") pursuant to Sensus' Terms of Sale, available at: sensus.com/TC ("Terms of Sale").

2. SR II® and accuSTREAM™ 5/8", 3/4" & 1" Meters are warranted to perform to AWWA New Meter Accuracy Standards for five (5) years from the date of Sensus shipment or until the registration shown below, whichever occurs first. Sensus further warrants that the SR II and accuSTREAM meters will perform to at least AWWA Repaired Meter Accuracy Standards for fifteen (15) years from the date of Sensus shipment or until the registration shown below, whichever occurs first:

	New Meter Accuracy	Repair Meter Accuracy
5/8" SR II Meter and accuSTREAM Meter	500,000 gallons	1,500,000 gallons
3/4" SR II Meter and accuSTREAM Meter	750,000 gallons	2,250,000 gallons
1" SR II Meter and accuSTREAM Meter	1,000,000 gallons	3,000,000 gallons

3. ally® Meters that register water flow are warranted to perform to the accuracy level set forth in the ally Data Sheet available at sensus.com/ally/datasheet for fifteen (15) years from the Date of Installation, but no longer than sixteen (16) years from date of manufacture, not including the meter's sensors, valve, and gear motor, which are warranted under different terms described below. As used herein, "Date of Installation" means the date after which the ally Meter has been out of empty pipe for seven (7) consecutive days, as those days are measured by the ally Meter and stored in the meter's nonvolatile memory.

4. iPERL® Meters that register water flow are warranted to perform to the accuracy levels set forth in the iPERL Data Sheet available at sensus.com/iperl/datasheet or by request from 1-800-METER-IT, for twenty (20) years from the date of Sensus shipment. The iPERL System Component warranty does not include the external housing.

5. Maincase of the SR II in both standard and low lead alloy meters are warranted to be free from defects in material and workmanship for twenty-five (25) years from the date of Sensus shipment. Composite and E-coated maincases will be free from defects in material and workmanship for fifteen (15) years from the date of Sensus shipment.

6. Sensus OMNI™ Meters and Propeller Meters are warranted to perform to AWWA New Meter Accuracy Standards for one (1) year from the date of Sensus shipment.

7. Sensus accuMAG™ Meters are warranted to be free from defects in material and workmanship, under normal use and service, for 18 months from the date of Sensus shipment or 12 months from startup, whichever occurs first.

8. Sensus Registers are warranted to be free from defects in material and workmanship from the date of Sensus shipment for the periods stated below or until the applicable registration for AWWA Repaired Meter Accuracy Standards, as set forth above, are surpassed, whichever occurs first:

5/8" thru 2" SR II, accuSTREAM Standard Registers	25 years
5/8" thru 2" SR II, accuSTREAM Encoder Registers	10 years
All HSPU, IMP Contactor, R.E.R. Elec. ROFI	1 year
Standard and Encoder Registers for Propeller Meters	1 year
OMNI Register with Battery	10 years

9. Sensus Electric and Gas Meters are warranted pursuant to the General Limited Warranty available at sensus.com/TC.

10. Batteries, iPERL System Components, AMR and FlexNet® Communication Network AMI Interface Devices are warranted to be free from defects in material and workmanship from the date of Sensus shipment for the period stated below:

Electronic TouchPad	10 years
Act-Pak® Remote Monitoring Instruments	1 year
Gas SmartPoint® Modules and Batteries	20 years[1]
6500 series Hand-Held Device	2 years
Vehicle Gateway Base Station (VGB) and other AMR Equipment	1 year
FlexNet Base Station (including the R100NA and M400 products)	1 year
iPERL System Battery and iPERL System Components	20 years[2]
Sensus® Electronic Register+™	20 years[1]
Sensus® Smart Gateway Sensor Interface	1 year
SmartPoint® 510M/520M Modules and Batteries	20 years[2]

Footnote 1: Sensus will repair or replace non-performing:

- Gas SmartPoint Modules (configured to the factory setting of six transmissions per day under normal system operation of up to one demand read to each SmartPoint Module per month and up to five firmware downloads during the life of the product) and batteries;
- Sensus Electronic Register+ with hourly reads

for the first ten (10) years from the date of Sensus shipment, and for the remaining ten (10) years, at a prorated percentage, applied towards the published list prices in effect for the year product is accepted by Sensus under warranty conditions according to the following schedule:

Years	Replacement Price	Years	Replacement Price
1 – 10	0%	16	55%
11	30%	17	60%
12	35%	18	65%
13	40%	19	70%
14	45%	20	75%
15	50%	>20	100%

Footnote 2: Sensus will repair or replace non-performing:

- iPERL System Batteries, and/or the iPERL System flowtube, the flow sensing and data processing assemblies, and the register ("iPERL System Components") with hourly reads
- SmartPoint 510M/520M Modules (configured to the factory setting of six transmissions per day under normal system operation of up to one demand read to each SmartPoint Module per month and up to five firmware downloads during the life of the product) and batteries, unless the SmartPoint 510M/520M Module is ever paired with an ally Meter, which event immediately amends the warranty terms to those described in Section 11;

at no cost for the first fifteen (15) years from the date of Sensus shipment, and for the remaining five (5) years at a prorated percentage, applied towards the published list price in effect for the year the product is accepted by Sensus under the warranty conditions according to the following schedule:

Years	Replacement Price
1 – 15	0%
16	30%
17	40%
18	50%
19	60%
20	70%
>20	100%

11. ally® Meter Batteries and Components, including SmartPoint 510M/520M Modules are warranted to be free from defects in material and workmanship from the Date of Installation, as defined in Section 3, for the period stated below:

Batteries	15 years[3]
Sensors	5 years
Valve & Gear Motor	5 years[4]
SmartPoint 510M/520M Modules and Batteries in service w/ally	15 years[3]

Footnote 3: If applicable, any SmartPoint 510M/520M Modules ever paired with an ally Meter are warranted with the following limitations:

- When configured to the default installation setting of six transmissions of metrology and pressure per day and one update of temperature per day, the SmartPoint is warranted to perform up to five (5) firmware upgrades for the SmartPoint Module and up to five (5) firmware upgrades for the ally Meter;
- 2500 Operational Commands, where "Operational Commands" include on demand reads (such as consumption, pressure, temperature), an ally valve command, or a configuration command; and
- 15 Diagnostic Commands, which includes two-way communications tests and installations

for the first ten (10) years from Date of Installation at no cost. For the remaining five (5) years, Customer will pay the reduced Replacement Price of the then-current list price in effect at the time the product is accepted for return in accordance with the following schedule:

Years	Replacement Price	Years	Replacement Price
1 – 10	0%	14	65%
11	35%	15	75%
12	45%	>15	100%
13	55%		

Footnote 4: Notwithstanding the foregoing, valve and gear motor components of ally Meters are not warranted beyond two thousand (2000) Valve State Operations, even if the warranty period provided herein has not yet expired. As used herein, "Valve State Operations" means adjustments of the Meter to open, close, or reduce flow.

12. iPERL and ally Connectors and Cables are warranted to be free from defects in materials and workmanship, under normal use and service, for ten (10) years from the date of Sensus shipment. Nicor or Itron connectors included with a Sensus product are warranted according to the terms for Third-Party Devices in Section 13.

13. Third-Party Devices are warranted to be free from defects in materials and workmanship, under normal use and service, for one (1) year from the date of Sensus shipment. As used in this Sensus Limited Warranty, "Third Party Devices" means any product, device, or component part used with a Sensus product that is manufactured or sold by any party that is not Sensus. Failure of a Third Party Device which subsequently causes failure to a Sensus device shall be the responsibility of the manufacturer of the Third Party Device.

8601 Six Forks Road, Suite 700
Raleigh, NC 27615
1-800-638-3748

ATTACHMENT A

sensus
a xylem brand

14. **Software.** Software supplied and/or licensed by Sensus is supported according to the terms of the applicable software license or usage agreement. Sensus warrants that any network and monitoring services shall be performed in a professional and workmanlike manner.

15. Return. Sensus' obligation, and Customer's exclusive remedy, under this Sensus Limited Warranty is, at Sensus' option, to either (i) repair or replace the product, provided the Customer (a) returns the product to the location designated by Sensus within the warranty period; and (b) prepays the freight costs both to and from such location; or (ii) deliver replacement components to the Customer, provided the Customer installs, at its cost, such components in or on the product (as instructed by Sensus), provided, that if Sensus requests, the Customer (a) returns the product to the location designated by Sensus within the warranty period; and (b) prepays the freight costs both to and from such location. In all cases, if Customer does not return the product within the time period designated by Sensus, Sensus will invoice, and Customer will pay within thirty days of the invoice date, for the cost of the replacement product and/or components.

The return of products for warranty claims must follow Sensus' Returned Materials Authorization (RMA) procedures. Water meter returns must include documentation of the Customer's test results. Test results must be obtained according to AWWA standards and must specify the meter serial number. The test results will not be valid if the meter is found to contain foreign materials. If Customer chooses not to test a Sensus water meter prior to returning it to Sensus, Sensus will repair or replace the meter, at Sensus' option, after the meter has been tested by Sensus. The Customer will be charged Sensus' then current testing fee. All product must be returned in accordance with the RMA process. For all returns, Sensus reserves the right to request meter reading records by serial number to validate warranty claims.

For products that have become discontinued or obsolete ("Obsolete Product"), Sensus may, at its discretion, replace such Obsolete Product with a different product model ("New Product"), provided that the New Product has substantially similar features as the Obsolete Product. The New Product shall be warranted as set forth in this Sensus Limited Warranty.

THIS SECTION 15 SETS FORTH CUSTOMER'S SOLE REMEDY FOR THE FAILURE OF THE PRODUCTS, SERVICES OR LICENSED SOFTWARE TO CONFORM TO THEIR RESPECTIVE WARRANTIES.

16. Warranty Exceptions and No Implied Warranties. This Sensus Limited Warranty does not include costs for removal or installation of products, or costs for replacement labor or materials, which are the responsibility of the Customer. The warranties in this Sensus Limited Warranty do not apply to goods that have been: installed improperly or in non-recommended installations; installed to a socket that is not functional, or is not in safe operating condition, or is damaged, or is in need of repair; tampered with; modified or repaired with parts or assemblies not certified in writing by Sensus, including without limitation, communication parts and assemblies; improperly modified or repaired (including as a result of modifications required by Sensus); converted; altered; damaged; read by equipment not approved by Sensus; for water meters, used with substances other than water, used with non-potable water, or used with water that contains dirt, debris, deposits, or other impurities; subjected to misuse, improper storage, improper care, improper maintenance, or improper periodic testing (collectively, "Exceptions."). If Sensus identifies any Exceptions during examination, troubleshooting or performing any type of support on behalf of Customer, then Customer shall pay for and/or reimburse Sensus for all expenses incurred by Sensus in examining, troubleshooting, performing support activities, repairing or replacing any Equipment that satisfies any of the Exceptions defined above. The above warranties do not apply in the event of Force Majeure, as defined in the Terms of Sale.

THE WARRANTIES SET FORTH IN THIS SENSUS LIMITED WARRANTY ARE THE ONLY WARRANTIES GIVEN WITH RESPECT TO THE GOODS, SOFTWARE, SOFTWARE LICENSES AND SERVICES SOLD OR OTHERWISE PROVIDED BY SENSUS. SENSUS EXPRESSLY DISCLAIMS ANY AND ALL OTHER REPRESENTATIONS, WARRANTIES, CONDITIONS, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE, REGARDING ANY MATTER IN CONNECTION WITH THIS SENSUS LIMITED WARRANTY OR WITH THE TERMS OF SALE, INCLUDING WITHOUT LIMITATION, WARRANTIES AS TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, NON-INFRINGEMENT AND TITLE.

SENSUS ASSUMES NO LIABILITY FOR COSTS OR EXPENSES ASSOCIATED WITH LOST REVENUE OR WITH THE REMOVAL OR INSTALLATION OF EQUIPMENT. THE FOREGOING REMEDIES ARE CUSTOMER'S SOLE AND EXCLUSIVE REMEDIES FOR THE FAILURE OF EQUIPMENT, LICENSED SOFTWARE OR SOFTWARE SERVICES, AND OTHER SERVICES TO CONFORM TO THEIR RESPECTIVE WARRANTIES.

17. Limitation of Liability. SENSUS' AGGREGATE LIABILITY IN ANY AND ALL CAUSES OF ACTION ARISING UNDER, OUT OF OR IN RELATION TO THIS AGREEMENT, ITS NEGOTIATION, PERFORMANCE, BREACH OR TERMINATION (COLLECTIVELY "CAUSES OF ACTION") SHALL NOT EXCEED THE TOTAL AMOUNT PAID BY CUSTOMER TO SENSUS UNDER THIS AGREEMENT. THIS IS SO WHETHER THE CAUSES OF ACTION ARE IN TORT, INCLUDING, WITHOUT LIMITATION, NEGLIGENCE OR STRICT LIABILITY, IN CONTRACT, UNDER STATUTE OR OTHERWISE.

AS A SEPARATE AND INDEPENDENT LIMITATION ON LIABILITY, SENSUS' LIABILITY SHALL BE LIMITED TO DIRECT DAMAGES. SENSUS SHALL NOT BE LIABLE FOR: (I) ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES; NOR (II) ANY REVENUE OR PROFITS LOST BY CUSTOMER OR ITS AFFILIATES FROM ANY END USER(S), IRRESPECTIVE OF WHETHER SUCH LOST REVENUE OR PROFITS IS CATEGORIZED AS DIRECT DAMAGES OR OTHERWISE; NOR (III) ANY IN/OUT COSTS; NOR (IV) MANUAL METER READ COSTS AND EXPENSES; NOR (V) DAMAGES ARISING FROM MAINCASE OR BOTTOM PLATE

BREAKAGE CAUSED BY FREEZING TERMPERATURES, WATER HAMMER CONDITIONS, OR EXCESSIVE WATER PRESSURE. "IN/OUT COSTS" MEANS ANY COSTS AND EXPENSES INCURRED BY CUSTOMER IN TRANSPORTING GOODS BETWEEN ITS WAREHOUSE AND ITS END USER'S PREMISES AND ANY COSTS AND EXPENSES INCURRED BY CUSTOMER IN INSTALLING, UNINSTALLING AND REMOVING GOODS. "END USER" MEANS ANY END USER OF ELECTRICITY/WATER/GAS THAT PAYS CUSTOMER FOR THE CONSUMPTION OF ELECTRICITY/WATER/GAS, AS APPLICABLE.

The limitations on liability set forth in this Agreement are fundamental inducements to Sensus entering into this Agreement. They apply unconditionally and in all respects. They are to be interpreted broadly so as to give Sensus the maximum protection permitted under law.

8601 Six Forks Road, Suite 700
Raleigh, NC 27615
1-800-638-3748

ATTACHMENT A

sēnsus
a **xylem** brand

General Limited Warranty

1. Terms of Sale. Sensus USA Inc. ("Sensus") warrants its products and parts as set forth below. All products are sold to the buyer ("Customer") pursuant to Sensus' Terms of Sale, available at: sensus.com/tc.

2. Electricity Meters and Electricity SmartPoint™ Modules. Sensus warrants the Sensus electricity meters and Sensus electricity SmartPoint Modules to be in compliance with their respective specifications under normal use and service, and to be free from material defects in materials and workmanship for a warranty period of twelve (12) months from the date of the installation or eighteen (18) months from the date of shipment, whichever occurs first. The warranty period for new spare parts and components sold by Sensus is twelve (12) months from the date of shipment. The warranty period for repaired or refurbished parts repaired by Sensus is ninety (90) days from the date of shipment, unless repaired pursuant to a warranty, in which case the repair is warranted for the time remaining of the original warranty period.

3. Gas Products and Gas SmartPoint Modules.

   a. Except for the Sonix meters, Sensus warrants the Sensus gas products to be in compliance with their respective specifications under normal use and service, and to be free from material defects in materials and workmanship for a warranty period of twelve (12) months from the date of the installation or eighteen (18) months from the date of shipment, whichever occurs first. Sensus warrants the Sensus Sonix meters to be free from material defects in materials and workmanship for a warranty period of fifteen (15) years from the date of shipment. Sensus warrants the batteries in the Sensus Sonix meters to be free from material defects in materials and workmanship for a warranty period of ten (10) years from the date of shipment. The warranty period for new spare parts and components sold by Sensus is twelve (12) months from the date of shipment. The warranty period for repaired or refurbished parts repaired by Sensus is ninety (90) days from the date of shipment, unless repaired pursuant to a warranty, in which case the repair is warranted for the time remaining of the original warranty period.

   b. Sensus warrants the Sensus gas SmartPoint Modules as set forth in the "G500" warranty, as set forth at: sensus.com/tc, or available at 1-800-METER-IT.

4. Water Meters and Water SmartPoint Modules. Sensus warrants the Sensus water meters and Sensus water SmartPoint Modules as set forth in the "G500" warranty, as set forth at: sensus.com/tc, or available at 1-800-METER-IT.

5. DA Devices and HAN Devices. Sensus warrants the Sensus DA Devices and Sensus HAN Devices to be in compliance with their respective specifications under normal use and service, and to be free from material defects in materials and workmanship for a warranty period of twelve (12) months from the date of shipment. The warranty period for new spare parts and components sold by Sensus is twelve (12) months from the date of shipment. The warranty period for repaired or refurbished parts repaired by Sensus is ninety (90) days from the date of shipment, unless repaired pursuant to a warranty, in which case the repair is warranted for the time remaining of the original warranty period.

6. RF Field Equipment. Sensus warrants the Sensus RF Field Equipment to be in compliance with their respective specifications under normal use and service, and to be free from material defects in materials and workmanship for a warranty period of twelve (12) months from the date of shipment.

7. Server Hardware. Sensus provides no warranty on the Server Hardware.

8. Third Party Goods. Notwithstanding anything to the contrary herein, Sensus does not warrant any goods manufactured or software supplied by third parties. For example, if Customer elects to buy meters from a third party, the Sensus SmartPoint Modules installed in such third party meters shall, subject to Section 11, below, be covered by the warranty above, but any warranty on the meter itself shall be a matter directly between Customer and such third party meter supplier.

9. Services. Sensus warrants that its services shall, at the time of performance, materially conform to the contract requirements, and shall be performed in a professional and workmanlike manner, free from material defects in workmanship.

10. Remedy.

    a. If any Field Device or RF Field Equipment fails during the applicable warranty period (a "Failed Good"), Sensus' obligation, and Customer's exclusive remedy, is, at Sensus' option, to either (i) repair or replace the Failed Good, provided the Customer (a) returns the product to the location designated by Sensus within the warranty period; and (b) prepays the freight costs both to and from such location; or (ii) deliver replacement components to the Customer, provided the Customer installs, at its cost, such components in or on the Failed Good (as instructed by Sensus). In all cases, Customer shall be responsible for returning the Failed Good to Sensus, including all costs associated with the return of the Failed Good, and Sensus shall be responsible for shipping the repaired or replaced good back to Customer's warehouse. Customer shall, in all cases, be responsible for the In/Out Costs. If Sensus determines that the returned good is not defective, Customer shall pay and/or reimburse Sensus for all expenses incurred by Sensus in the examination of the returned good.

    b. Customer's remedy under the warranty for services shall be, at Sensus' sole cost and expense, to correct or re-perform any defective or non-conforming services to assure compliance with the contract requirements.

    c. THIS SECTION 10 SETS FORTH CUSTOMER'S SOLE REMEDY WITH RESPECT TO A FAILED GOOD OR ANY DEFECTIVE OR NON-CONFORMING SERVICE.

11. Warranty Exceptions. This General Limited Warranty does not include costs for removal or installation of products, or costs for replacement labor or materials, which are the responsibility of the Customer. The warranties in this General Limited Warranty do not apply to goods that have been: installed improperly or in non-recommended installations; installed to a socket that is not functional, or is not in safe operating condition, or is damaged, or is in need of repair; tampered with; modified or repaired with parts or assemblies not certified in writing by Sensus, including without limitation, communication parts and assemblies; improperly modified or repaired (including as a result of modifications required by Sensus); converted; altered; damaged; read by equipment not approved by Sensus; for water meters, used with substances other than water, used with non-potable water, or used with water that contains dirt, debris, deposits, or other impurities; subjected to misuse, improper storage, improper care, improper maintenance, or improper periodic testing (collectively, "Exceptions."). If Sensus identifies any Exceptions during examination, troubleshooting or performing any type of support on behalf of Customer, then Customer shall pay for and/or reimburse Sensus for all expenses incurred by Sensus in examining, troubleshooting, performing support activities, repairing or replacing any Equipment that satisfies any of the Exceptions defined above. The above warranties do not apply in the event of Force Majeure, as defined in the Terms of Sale.

12. THE WARRANTIES SET FORTH IN THIS GENERAL LIMITED WARRANTY ARE THE ONLY WARRANTIES GIVEN WITH RESPECT TO THE GOODS, SOFTWARE LICENSES AND SERVICES SOLD OR OTHERWISE PROVIDED BY SENSUS. SENSUS EXPRESSLY DISCLAIMS ANY AND ALL OTHER REPRESENTATIONS, WARRANTIES, CONDITIONS, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE, REGARDING ANY MATTER IN CONNECTION WITH THIS GENERAL LIMITED WARRANTY OR WITHT EH TERMS OF SALE, INCLUDING WITHOUT LIMITATION, WARRANTIES AS TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, NON-INFRINGEMENT AND TITLE.

13. SENSUS ASSUMES NO LIABILITY FOR COSTS OR EXPENSES ASSOCIATED WITH LOST REVENUE OR WITH THE REMOVAL OR INSTALLATION OF EQUIPMENT. THE FOREGOING REMEDIES ARE CUSTOMER'S SOLE AND EXCLUSIVE REMEDIES FOR THE FAILURE OF EQUIPMENT, LICENSED SOFTWARE OR SERVICES TO CONFORM TO THEIR RESPECTIVE WARRANTIES.

14. Limitation of Liability

    a. SENSUS' AGGREGATE LIABILITY IN ANY AND ALL CAUSES OF ACTION ARISING UNDER, OUT OF OR IN RELATION TO THIS AGREEMENT, ITS NEGOTIATION, PERFORMANCE, BREACH OR TERMINATION (COLLECTIVELY "CAUSES OF ACTION") SHALL NOT EXCEED THE TOTAL AMOUNT PAID BY CUSTOMER TO SENSUS UNDER THIS AGREEMENT. THIS IS SO WHETHER THE CAUSES OF ACTION ARE IN TORT, INCLUDING, WITHOUT LIMITATION, NEGLIGENCE OR STRICT LIABILITY, IN CONTRACT, UNDER STATUTE OR OTHERWISE.

    b. AS A SEPARATE AND INDEPENDENT LIMITATION ON LIABILITY, SENSUS' LIABILITY SHALL BE LIMITED TO DIRECT DAMAGES. SENSUS SHALL NOT BE LIABLE FOR: (I) ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES; NOR (II) ANY REVENUE OR PROFITS LOST BY CUSTOMER OR ITS AFFILIATES FROM ANY END USER(S), IRRESPECTIVE OF WHETHER SUCH LOST REVENUE OR PROFITS IS CATEGORIZED AS DIRECT DAMAGES OR OTHERWISE; NOR (III) ANY IN/OUT COSTS; NOR (IV) MANUAL METER READ COSTS AND EXPENSES.

    c. The limitations on liability set forth in this Agreement are fundamental inducements to Sensus entering into this Agreement. They apply unconditionally and in all respects. They are to be interpreted broadly so as to give Sensus the maximum protection permitted under law.

    d. To the maximum extent permitted by law, no Cause of Action may be instituted by Customer against Sensus more than TWELVE (12) MONTHS after the Cause of Action first arose. In the calculation of any damages in any Cause of Action, no damages incurred more than TWELVE (12) MONTHS prior to the filing of the Cause of Action shall be recoverable.

15. Definitions. Any terms used in this General Limited Warranty as defined terms, and which are not defined herein, shall have the meanings given to those terms in the Terms of Sale.

    a. "Agreement" means this General Limited Warranty, Customer's purchase order (except any Additional Terms), Sensus' Acknowledgement Form (if any), Sensus' invoice and the Terms of Sale.

    b. "DA Devices" means RTMs and RTUs.

    c. "Echo Transceiver" (formerly "FlexNet Network Portal" and "FNP") identifies the Sensus standalone, mounted relay device that takes the radio frequency readings from the SmartPoint Modules and relays them by radio frequency to the relevant FlexNet Base Station.

    d. "End User" means any end user of electricity/water/gas that pays Customer for the consumption of electricity/water/gas, as applicable.

    e. "Equipment" means the Field Devices, RF Field Equipment, Server Hardware, and any other goods sold hereunder.

    f. "FlexNet Base Station" (formerly "Tower Gateway Base Station" and "TGB") identifies the Sensus manufactured device consisting of one transceiver, to be located on a tower that receives readings from the SmartPoint Modules (either directly or via an Echo Transceiver) by radio frequency and passes those readings to the RNI by TCP/IP backhaul communication.

    g. "Field Devices" means the meters, SmartPoint Modules, DA Devices and HAN Devices.

    h. "Force Majeure" shall have the meaning set forth in the Terms of Sale.

    i. "HAN Devices" means the PCTs, IHDs and LCMs.

    j. "IHDs" means the in-home displays.

    k. "In/Out Costs" means any costs and expenses incurred by Customer in transporting goods between its warehouse and its End User's premises and any costs and expenses incurred by Customer in installing, uninstalling and removing goods.

    l. "LCMs" means the load control modules.

    m. "PCTs" means the programmable controllable thermostats.

    n. "Remote Transceiver" (formerly "FlexNet Remote Portal" and "FRP") identifies the Sensus standalone, mounted relay device that takes the radio frequency readings from the SmartPoint Modules and relays them directly to the RNI by TCP/IP backhaul communication.

    o. "RNI" identifies the regional network interfaces consisting of hardware and software used to gather, store, and report data collected by the FlexNet Base Stations from the SmartPoint Modules.

    p. "RF Field Equipment" means, collectively, FlexNet Base Stations, Echo Transceivers and Remote Transceivers.

    q. "RTMs" means the telemetric remote telemetry modules.

    r. "RTUs" means telemetric MicroRTU (T866).

    s. "Server Hardware" means the RNI hardware and the FlexServer hardware.

    t. "SmartPoint™ Modules" identifies the Sensus transmission devices installed on devices such as meters, distribution automation equipment and demand/response devices located at Customer's End Users' premises that take the readings of the meters and transmit those readings by radio frequency to the relevant FlexNet Base Station, Remote Transceiver or Echo Transceiver.

Sensus Terms of Sale

1. DEFINITIONS. "Customer" means the party purchasing goods or services pursuant to these Terms of Sale ("Terms"). "Sensus" means Sensus USA Inc., a Delaware corporation. "Deliverables" means the Sensus goods and services sold or otherwise provided pursuant to this Agreement. Software licenses are provided solely through a separate Sensus software license.

2. CONTRACT OF SALE. All Sensus Deliverables are offered for sale subject to the prices and other terms specified in (a) the applicable Sensus quotation, proposal or pricelist, and (b) these Terms (together, the "Proposal"), all of which are subject to the correction of clerical errors. A Customer's purchase order or similar writing shall constitute an acceptance of the offer to sell; however, any inconsistent, additional or different terms to the Proposal contained in a Customer's request for quotation or purchase order (collectively, "Additional Terms") are hereby objected to and rejected by Sensus. Such Additional Terms will not become part of the contract of sale unless accepted by Sensus in a writing signed by a vice president (or higher) of Sensus.

3. ENTIRE AGREEMENT. These Terms, the General Limited Warranty, Customer's purchase order (except any Additional Terms), Sensus' Acknowledgement Form (if any), and Sensus' invoice constitutes the entire agreement ("Agreement") between the parties hereto with respect to the subject matter hereof and supersedes any and all prior agreements, understanding or other communications, whether written or oral, formal or informal, between them in respect of the order. No consent, waiver, alteration, amendment, or modification shall be binding unless in writing and signed by a vice president (or higher) of Sensus.

4. PRICES. All prices are subject to change based on Sensus' selling prices in effect as of date of shipment. Prices quoted for blanket orders are subject to review and retroactive adjustment, if necessary, based on actual quantities shipped.

5. TAXES. All prices quoted are exclusive of federal, state and municipal taxes. Customer shall be liable for all sales, use and other taxes (whether local, state or federal) imposed on this Agreement or on the Deliverables.

6. TITLE AND RISK OF LOSS. All Deliverables are shipped Ex Works shipping point, prepay freight and add. Title to, and property in, the Deliverables shall pass to Customer upon shipment. Risk of loss of the Deliverables shall also pass to Customer upon shipment.

7. PAYMENT TERMS. Customer shall pay all invoices in USD within thirty (30) days of the invoice date. No deductions, whether by way of set-off, counterclaim, withholding, or otherwise, shall be made by the Customer. Sensus reserves the right to establish credit limits for Customer and may require full or partial payment prior to provision of any Deliverables. All payments shall be made via electronic payment according to instructions provided by Sensus. The Customer must notify Sensus, in writing, within seven days of receipt of an invoice if the Customer disputes such invoice. In the absence of such notice the Customer shall not be entitled to dispute an invoice. Save for any invoices disputed in good faith in accordance with the previous sentence, if the Customer does not pay within the time provided in this Agreement, the amount due shall bear interest at the lower of (i) one and a half percent (1.5%) per month up to a maximum of eighteen percent (18%) per year; or (ii) the highest rate permitted by applicable law. Should Customer become delinquent in payment of sums due hereunder, Sensus shall not be obligated to continue performance.

8. PACKAGING. Sensus reserves the right to select the manner in which Deliverables are packaged. Quoted prices include regular packaging. Special requirements for packaging will be subject to extra charges.

9. DELIVERY. Shipping dates and other dates quoted by Sensus are made in good faith but are not guaranteed. Dates cited for delivery are approximate only. If no dates are specified, Sensus will use its discretion to determine the shipping date. Sensus reserves the right to extend shipping dates and/or to make partial shipments as Sensus deems necessary in its sole discretion, without liability to Customer. In the absence of shipping instructions from Customer, Sensus will use its discretion as to the selection of shipping services and routings. If the Customer fails to take delivery of the Deliverables within seven (7) days of notification that the Deliverables are ready for delivery, Sensus shall be entitled, but is not required, on behalf of the Customer to put the relevant Deliverables into storage at the Customer's expense and risk. Delivery to storage shall constitute delivery to the Customer. Installation of Deliverables is the responsibility of the Customer unless otherwise agreed in writing.

10. FORCE MAJEURE. If Sensus becomes unable, either wholly or in part, by an event of Force Majeure, to fulfill its obligations under this Agreement, the obligations affected by the event of Force Majeure will be suspended during the continuance of that inability. "Force Majeure" means an event beyond the reasonable control of Sensus, including without limit acts of God, hurricane, flood, volcano, tsunami, tornado, storm, tempest, mudslide, vandalism, illegal or unauthorized radio frequency interference, strikes, lockouts, or other industrial disturbances, immigration, unavailability of component parts of any Deliverables provided hereunder, acts of public enemies, border disputes, border disruptions, delivery vehicle impound, wars, blockades, insurrections, riots, epidemics, earthquakes, fires, restraints or prohibitions by any court, board, department, commission or agency of the United States or any States, any arrests and restraints, civil disturbances and explosions.

11. CANCELLATION. Orders submitted to Sensus may not be canceled or amended, or deliveries deferred, by Customer except with Sensus' prior written consent, and then only upon such terms as shall be acceptable to Sensus.

12. WARRANTIES. Sensus' sole warranty and remedies associated therewith are set forth in the General Limited Warranty found at: sensus.com/tc, or available at 1-800-METER-IT, which General Limited Warranty is hereby incorporated into these Terms. THE WARRANTIES IN THIS SECTION ARE THE ONLY WARRANTIES GIVEN WITH RESPECT TO DELIVERABLES SOLD OR OTHERWISE PROVIDED BY SENSUS. SENSUS EXPRESSLY DISCLAIMS ANY AND ALL OTHER REPRESENTATIONS, WARRANTIES, CONDITIONS, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE, REGARDING ANY MATTER IN CONNECTION WITH THESE TERMS OF SALE, INCLUDING WITHOUT LIMITATION, WARRANTIES AS TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, NON-INFRINGEMENT AND TITLE.

13. INTELLECTUAL PROPERTY. No Intellectual Property is assigned to Customer hereunder. Sensus shall own or continue to own all Intellectual Property used or created in the course of performing this Agreement. To the extent, if any, that any ownership interest in and to such Intellectual Property does not automatically vest in Sensus, and instead vests in Customer, Customer agrees to grant and assign and hereby does grant and assign to Sensus all right, title, and interest that Customer may have in and to such Intellectual Property. Customer agrees not to reverse engineer any Deliverables purchased or provided hereunder. "Intellectual Property" means patents and patent applications, inventions (whether patentable or not), trademarks, service marks, trade dress, copyrights, trade secrets, know-how, data rights, database rights, specifications, drawings, designs, maskwork rights, moral rights, author's rights, and other intellectual property rights, as may exist now or hereafter come into existence, and all renewals and extensions thereof, regardless of whether any of such rights arise under the laws of the United States or of any other state, country or jurisdiction, any registrations or applications thereof, and all goodwill pertinent thereto. The Customer waives any moral rights they may have in the Intellectual Property.

14. LIMITATION OF LIABILITY.

    (a) SENSUS' AGGREGATE LIABILITY IN ANY AND ALL CAUSES OF ACTION ARISING UNDER, OUT OF OR IN RELATION TO THIS AGREEMENT, ITS NEGOTIATION, PERFORMANCE, BREACH OR TERMINATION (COLLECTIVELY "CAUSES OF ACTION") SHALL NOT EXCEED THE TOTAL AMOUNT PAID BY CUSTOMER TO SENSUS UNDER THIS AGREEMENT. THIS IS SO WHETHER THE CAUSES OF ACTION ARE IN TORT, INCLUDING, WITHOUT LIMITATION, NEGLIGENCE OR STRICT LIABILITY, IN CONTRACT, UNDER STATUTE, OR OTHERWISE.

    (b) (b) AS A SEPARATE AND INDEPENDENT LIMITATION ON LIABILITY, SENSUS' LIABILITY SHALL BE LIMITED TO DIRECT DAMAGES. SENSUS SHALL NOT BE LIABLE FOR: (I) ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES; NOR (II) ANY REVENUE OR PROFITS LOST BY CUSTOMER OR ITS AFFILIATES FROM ANY END USER IRRESPECTIVE OF WHETHER SUCH LOST REVENUE OR PROFITS IS CATEGORIZED AS DIRECT DAMAGES OR OTHERWISE; NOR (III) ANY IN/OUT COSTS; NOR (IV) CLAIMS MADE BY A THIRD PARTY; NOR (V) MANUAL METER READ COSTS AND EXPENSES. "IN/OUT COSTS" MEANS ANY COSTS AND EXPENSES INCURRED BY CUSTOMER IN TRANSPORTING GOODS BETWEEN ITS WAREHOUSE AND ITS END USER'S PREMISES AND ANY COSTS AND EXPENSES INCURRED BY CUSTOMER IN INSTALLING, UNINSTALLING AND REMOVING GOODS. "END USER" MEANS ANY END USER OF ELECTRICITY/WATER/GAS THAT PAYS CUSTOMER FOR THE CONSUMPTION OF ELECTRICITY/WATER/GAS, AS APPLICABLE.

    (c) The limitations on liability set forth in this Agreement are fundamental inducements to Sensus entering into this Agreement. They apply unconditionally and in all respects. They are to be interpreted broadly so as to give Sensus the maximum protection permitted under law.

    (d) To the maximum extent permitted by law, no Cause of Action may be instituted by Customer against Sensus more than TWELVE (12) MONTHS after the Cause of Action first arose. In the calculation of any damages in any Cause of Action, no damages incurred more than TWELVE (12) MONTHS prior to the filing of the Cause of Action shall be recoverable.

    (e) If Customer is not the sole end user and ultimate owner of the Deliverables, then Customer shall ensure by its contract with the end user and ultimate owner (collectively, "Owner") that Sensus is given the benefit of the exclusions and limitations set out in these Terms. Customer agrees to indemnify, defend, and hold harmless Sensus from and against all Losses (defined below) alleged by any Owner to the extent that Sensus would not be liable to Customer under these Terms if the claim had been made by Customer.

15. INDEMNIFICATION. Customer agrees to defend, indemnify and hold harmless Sensus from and against all claims, liabilities, demands, damages, losses, costs and expenses, in law or in equity, of every kind and nature whatsoever (collectively, "Losses"), to the extent arising out of Customer's use of the Deliverables,, except to the extent such Losses arise out of a breach of this Agreement by Sensus.

16. CONFIDENTIALITY. Customer shall (and shall cause its employees, contractors and any Owner to) keep all Sensus Confidential Information strictly confidential and shall not disclose it to any third party or use it, except to the extent reasonably required to perform and enforce this Agreement or as required under applicable law, court order or regulation. As used herein, "Sensus Confidential Information" means any and all non-public information disclosed by Sensus, including without limitation, all technical information about products or services, pricing information, marketing and marketing plans, provision of Deliverables, performance of the Deliverables, Deliverables architecture and design, other business and financial information, software and all trade secrets. Sensus Confidential Information may be transmitted orally, in writing, electronically or otherwise observed by Customer. Notwithstanding the foregoing, "Sensus Confidential Information" shall not include: (i) any information in the public domain other than due to Customer's breach of this Agreement; (ii) any information in the possession of the Customer without restriction prior to disclosure by Sensus; or (iii) any information independently developed by the Customer without reliance on or access to the information disclosed hereunder by Sensus.

17. RETURNS. No Deliverables may be returned for credit or repair without the prior written authorization of Sensus. Authorized return shipments must be returned in good condition to Sensus' designated receiving point, must be shipped in suitable packaging, must be accompanied by a packing slip, including Sensus' Return Authorization Number, and must have transportation charges prepaid. Deliverables are deemed returned upon Sensus' receipt of the relevant Deliverable (in compliance with this section) at the address designated by Sensus. Correspondence concerning all returned Deliverables must be addressed to the appropriate Sensus office. Sensus reserves the right to deduct an adequate service charge to cover all inspection, testing and handling from any credit.

18. ASSIGNMENT. Customer may not assign, transfer or delegate this Agreement or any part of Customer's rights or duties without prior written consent of Sensus. Any attempted assignment in violation of this section shall be null and void.

19. GOVERNING LAW AND DISPUTE RESOLUTION. This Agreement shall be governed by, construed and enforced in accordance with the laws of the State of Delaware, without regard to conflicts of law principles. Any and all disputes arising under, out of, or in relation to this Agreement or its performance ("Disputes") shall first be resolved by the Parties attempting mediation in Delaware. If the Dispute is not resolved within sixty (60) days of the commencement of the mediation, it shall be litigated in the state or federal courts located in the State of Delaware. TO THE MAXIMUM EXTENT PERMITTED BY LAW, THE PARTIES AGREE TO A BENCH TRIAL AND THAT THERE SHALL BE NO JURY IN ANY DISPUTES.

20. **COMPLIANCE WITH LAWS, INCLUDING ANTI-CORRUPTION LAWS**. Customer shall comply with all applicable laws and regulations, as set forth at the time of acceptance and as may be amended, changed, or supplemented. Customer shall not take any action, or permit the taking of any action by a third party, which may render Sensus liable for a violation of applicable laws. (a) *EXPORT CONTROL LAWS.* Customer shall; (i) comply with all applicable U.S., state, and local laws and regulations governing the use, export, import, re-export, and transfer of products, technology, and services; and (ii) obtain all required authorizations, permits, and licenses. Customer shall immediately notify Sensus, and immediately cease all activities with regards to the applicable transaction, if the Customer knows or has a reasonable suspicion that the Deliverables may be directed to countries in violation of any export control laws. By ordering Deliverables, Customer certifies that it is not on any U.S., or other applicable, government export exclusion list. (b) *ANTI-CORRUPTION LAWS.* Customer shall comply with the United States Foreign Corrupt Practices Act (FCPA), 15 U.S.C. §§ 78dd-1, et seq.; laws and regulations implementing the OECD's Convention on Combating Bribery of Foreign Public Officials in International Business Transactions; the U.N. Convention Against Corruption; the Inter-American Convention Against Corruption; and any other applicable laws and regulations relating to anti-corruption in the Customer's county or any country where performance of this Agreement, or delivery or use of Deliverables will occur.

21. SEVERABILITY. In the event any provision of this Agreement is held to be void, unlawful or otherwise unenforceable, that provision will be severed from the remainder of the Agreement and replaced automatically by a provision containing terms as nearly like the void, unlawful, or unenforceable provision as possible; and the Agreement, as so modified, will continue to be in full force and effect.

22. NON-WAIVER. Failure or delay of Sensus to exercise a right or power under this Agreement shall not operate as a waiver thereof, nor shall any single or partial exercise of a right or power preclude any other future exercise thereof.