PERFORMANCE CONTRACTING AGREEMENT

between

City of Bellaire, Texas

and

Siemens Industry, Inc.,
Building Technologies Division

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Number:

Article 1
AGREEMENT

THIS **PERFORMANCE CONTRACTING AGREEMENT** ("Agreement") is made this day of August, 2016 (the "Effective Contract Date", defined below), by and between Siemens Industry, Inc., Building Technologies Division ("SIEMENS") and the party identified below as the CLIENT.

The CLIENT: **City of Bellaire, TX**
7008 South Rice Ave.
Bellaire, Texas 77401-4495

DESIGNATED REPRESENTATIVE: Mr. Paul Hofmann
PHONE: 713-662-8228 FAX:

Siemens Industry, Inc., Building Technologies Division
1000 Deerfield Parkway
Buffalo Grove, Illinois 60089

With offices at: 8850 Fallbrook Road
Houston, Texas 77064

DESIGNATED REPRESENTATIVE: Mr. Robert McMillin
PHONE: 281-949-3000 FAX:

For Work and Services in connection with the following project (the "Project"):

City of Bellaire, Texas Performance Contracting Project

The CLIENT considered performing the following FIMs but at this time, has determined to exclude them from the Scope of Work and Services, Exhibit A:

1. Additional WWTP Upgrades
2. Lighting Enhancements & Renovations
3. HVAC Replacements
4. Energy Management Control Systems
5. Traffic Signal Upgrades
6. Water Line Replacements

Articles and Attachments

This Agreement consists of this document, which includes the following articles and exhibits which are acknowledged by the CLIENT and SIEMENS and incorporated into the Agreement by this reference:

Articles

1. Agreement
2. Glossary
3. General
4. Performance Guarantee
5. Work BY SIEMENS
6. The CLIENT's Responsibilities
7. Changes and Delays
8. Compensation
9. Acceptance
10. Insurance and Allocation of Risk
11. Hazardous Material Provisions
12. Miscellaneous Provisions
13. Maintenance Services Program

Exhibits

Exhibit A	Scope of Work and Services
Exhibit B	Payment Schedule(s)
Exhibit C	Performance Assurance
Exhibit D1	Form of Certificate of Substantial Completion
Exhibit D2	Form of Certificate of Final Completion
Attachment #1	Water Meter Annual Revenue Calculations
Attachment #2	Water Meter Baseline Account List
Attachment #3	Water Meter Baseline Consumption Data
Attachment #4	Water Meter Baseline Test Results
Attachment #5	Water Meter Warranty Documents

This Agreement, when executed by an authorized representative of the CLIENT and authorized representatives of SIEMENS, constitutes the entire, complete and exclusive agreement between the Parties relative to the project scope stated in Exhibit A. This Agreement supersedes all prior and contemporaneous negotiations, statements, representations, agreements, letters of intent, awards, or proposals, either written or oral relative to the same, and may be modified only by a written instrument signed by both Parties.

COMPENSATION/TERMS OF PAYMENT:

As full consideration for the performance of the Work and Services set forth in Exhibit A, and for the Performance Assurance set forth in Exhibit C, the CLIENT shall pay SIEMENS in such manner and amounts as agreed to in Exhibit B.

Agreed for **City of Bellaire, Texas**

(Signature) by: _____

Print Name and Title: Andrew S. Friedberg, Mayor

(Signature) by: _____

Print Name and Title: _____

Agreed for **Siemens Industry, Inc.**

(Signature) by: _____ Peter Kamps, Vice President, Finance & Business Administration

Print Name and Title: _____

(Signature) by: _____ David R. Mangano, Sr. Vice President, Field Operations

Print Name and Title: _____

Article 2

Glossary

The following terms shall for all purposes have the meanings stated herein, unless the context otherwise specifies or requires, or unless otherwise defined in the Agreement:

Acceptance means the CLIENT has signed, or is deemed to have signed, a Certificate of Final Completion.

Acceptance Date means the date on which the CLIENT signs or is deemed to have signed a Certificate of Final Completion.

Annual Performance Assurance Report means the document prepared by SIEMENS and submitted to the CLIENT as part of the Performance Assurance Service Program, which identifies the Savings achieved for the applicable Annual Period.

Annual Period means a twelve (12) month period beginning on the Guarantee Date or on any anniversary date thereof.

Annual Realized Savings means the actual Savings achieved by the CLIENT during an Annual Period, calculated as the sum of the Measured & Verified Savings plus the Stipulated Savings.

Applicable Law means laws, ordinances, codes, rules and regulations applicable to the Work and in effect on the Effective Contract Date.

Baseline means the measurements of Facility energy usage taken prior to the Effective Contract Date, and the Facility operating practices in effect prior to the Effective Contract Date, as set forth in the Performance Assurance, Exhibit C.

Baseline Period means the period of time from which data is provided to SIEMENS to derive the Baseline measurements. The Baseline Period is set forth in the Performance Assurance, Exhibit C.

BTU means a British Thermal Unit and is a unit of thermal energy.

Capital Off-Set Savings means a sub-category of Operational Savings where Savings will result in a cost effective upgrade to the Facility to address one or more of the following issues: potential future increased costs, comfort, code non-compliance, usage requirements, user needs and/or expectations.

Certificate of Final Completion means a document, in the form attached as Exhibit D2 hereto, indicating that the Work identified in Article 1 of the Scope of Work and Services-Exhibit A has been completed in accordance with the Agreement, including all items in the Outstanding Items List(s).

Certificate of Substantial Completion means a document, in the form attached as Exhibit D1 hereto, indicating that the Work, or a designated portion of the Work, is Substantially Complete in accordance with the Agreement. A Certificate of Substantial Completion may be accompanied by an Outstanding Items List.

CLIENT Representative means the person identified to SIEMENS by the CLIENT as the person authorized to make decisions on behalf of the CLIENT as set forth in Section 6.1(a) hereof.

Construction Period means the period between the Effective Contract Date and the first day of the month following the Acceptance Date.

Construction Period Savings means the actual accumulated Measured & Verified Savings plus the Stipulated Savings achieved from the Effective Contract Date until the Guarantee Date.

Contracted Baseline means the post-FIM-implementation Facility operating profile based on parameters described in Exhibit C, which the CLIENT shall maintain throughout the Performance Guarantee Period and are relied upon by SIEMENS for the calculation of Guaranteed Savings as provided in the Performance Assurance, Exhibit C. The Contracted Baseline must also include stipulated hours of operation and plug-loads for all Facilities, and must include stipulated blended, or non-blended, utility rates.

Deferred Maintenance means a sub-category of Operational Savings where Savings result from a reduction of current or potential future repair and maintenance costs due to certain work being performed hereunder where such work had been previously postponed.

Deliverables shall mean collectively, (a) any Equipment and any Software Product deliverable to CLIENT from SIEMENS under or in connection with the Work, and (b) any Work Product Deliverables.

Effective Contract Date is the date appearing at the top of this Agreement, unless specifically indicated otherwise.

Energy Conservation Measure or **ECM** means the SIEMENS Products and/or other third party equipment, devices, materials and/or software as installed by SIEMENS at the Facilities, or as repaired or replaced by SIEMENS or the CLIENT hereunder, for the purpose of improving the efficiency of utility consumption.

Equipment means the installed physical equipment to be provided by SIEMENS as described in the Scope of Work and Services, Exhibit A.

Escalation Rate means an annual percentage increase to be applied to the previous Annual Period's energy savings, operational savings and service pricing, beginning and occurring on dates outlined in the Performance Assurance, Exhibit C. A different Escalation Rate may be applied to differing Savings calculations and/or payment schedules depending on the percentage agreed upon by the Parties.

Facility or Facilities means the **building**(s) or structure(s) where Work will be installed or implemented.

Facility Improvement Measures or **FIMs** means the (i) Instruments, know-how and Intellectual Property, including but not limited to methods and techniques for energy conservation, owned or licensed by SIEMENS and employed by SIEMENS to perform the Work and Services under this Agreement; and, (ii) the installation of Equipment and Software Products with the intent of generating net savings or efficiencies at or in connection with the operation of the Facilities. A FIM may include one or multiple ECMs as well as any non-conservation-related activities, means or methods.

FEMP means the Federal Energy Management Program managed by the United States Department of Energy.

FEMP Guidelines means the FEMP M&V Guidelines v. 3.0 published by FEMP as M&V Guidelines; Measurement and Verification for Federal Energy Management Projects.

Guarantee Date means the first day of the month following the date on which the CLIENT executes, or is deemed to have executed, the Certificate of Final Completion.

Guaranteed Annual Savings are the Guaranteed Measured & Verified Savings plus the Stipulated Savings that SIEMENS guarantees will be achieved in an Annual Period of the Performance Guarantee Period.

Guaranteed Measured & Verified Savings means the Measured & Verified Savings that SIEMENS guarantees will be achieved, as described in the Performance Assurance, Exhibit C.

Guaranteed Savings means the amount of Savings that SIEMENS guarantees will be achieved at the Facility during the Performance Guarantee Period. as identified in the Performance Assurance, Exhibit C as subject to the limitation identified in Section 4.8.

Hazardous Materials refers to the definition found in Section 11.1.

Instruments means all know-how, tools and related documentation owned or licensed by SIEMENS and used by SIEMENS to install or commission Equipment and Software Products for operation at the Facility, including but not limited to tools for installing any Software Products in Equipment, performing diagnostics on Equipment as installed in the Facility as well as any reports, notes, calculations, data, drawings, estimates, specifications, manuals, documents, all computer programs, codes and computerized materials prepared by or for SIEMENS and used by SIEMENS to provide an ECM or a FIM. Instruments excludes Work Product Deliverables.

Intellectual Property Rights or Intellectual Property means all trade secrets, patents and patent applications, trade marks (whether registered or unregistered and including any goodwill acquired in such trade marks), services marks, trade names, internet domain names, copyrights (including rights in computer software), moral rights, database rights, design rights, rights in know-how, rights in inventions (whether patentable or not) including, but not limited to, any and all renewals or extensions thereof, and all other proprietary rights (whether registered or unregistered, and any application for the foregoing), and all other equivalent or similar rights which may subsist anywhere in the world, including, but not limited to, any and all renewals or extensions thereof.

IPMVP means the International Performance Measurement and Verification Protocol, Volume 1, EVO 10000-1.2007 as prepared by the Efficiency Valuation Organization.

kW and **kWh** means kilowatt and kilowatt hour, respectively.

Maintenance Services Program or **MSP** means the Services performed by SIEMENS to maintain the Equipment in good working order. The MSP may also contain Services unrelated to the maintenance of the Equipment. If applicable, the MSP is more fully described in the Scope of Work and Services, Exhibit A.

Material Change means a measurable deviation in the Contracted Baseline such that there is an adverse impact on the Annual Realized Savings which results or will result in a Savings Shortfall.

Measured & Verified Savings means those Savings that can be calculated and ascertained by the methodology set forth in the Performance Assurance, Exhibit C.

Oil refers to the definition found in Section 11.1.

Operational Savings means Savings derived from reduced operational expenses, including but not limited to, Deferred Maintenance, or Capital Off-Set Savings. Operational Savings can only be expressed in monetary value and are Stipulated Savings.

Outstanding Items List means a list of items in need of completion or correction that relates to the Work, or a designated portion thereof that is Substantially Complete. The absence of such items does not deprive the CLIENT of the ability to put such Work, or a designated portion thereof to beneficial use. An Outstanding Items List may be attached to a Certificate of Substantial Completion.

Parties means the CLIENT and SIEMENS.

Performance Assurance is the process of ascertaining whether the FIMs are performing at the level necessary to achieve the Guaranteed Savings.

Performance Assurance Services Program or PASP means the Services required to monitor the operation of the FIMs so that SIEMENS can provide the Annual Performance Assurance Report detailing the Annual Realized Savings and comparing the same to the Annual Guaranteed Savings based upon the calculations agreed to by the Parties in the Performance Assurance, Exhibit C. The Services provided under the PASP are described in the Scope of Work and Services, Exhibit A.

Performance Guarantee means the guarantee that SIEMENS makes to the CLIENT which is reconciled and confirmed through the Performance Assurance process set forth in the Performance Assurance, Exhibit C.

Performance Guarantee Period means the timeframe from the Guarantee Date to the last day of the final Annual Period as described in Table 1.1 of the Performance Assurance, Exhibit C, or the period from the Guarantee Date until the termination of this Agreement, whichever occurs earlier.

Permitted Users means the CLIENT, its employees and agents.

Savings means the Parties' intended result from implementing all FIMs. Savings can be derived from reductions in energy or utility consumption, reductions in operating expenses, a changed utility rate classification or a combination thereof. The Savings that are achieved from reduced energy or utility consumption are converted to a dollar figure based upon the calculation in Article 4.1.1 and as detailed in the Performance Assurance, Exhibit C. When converted to a dollar figure, these Savings become energy cost savings. Operational Savings are only expressed in a dollar figure.

Savings Shortfall means the Annual Realized Savings less the Guaranteed Annual Savings for the Annual Period resulting in an amount less than zero.

Services means those services to be provided by SIEMENS as described in the Scope of Work and Services, Exhibit A.

SIEMENS Pre-existing Intellectual Property means any Intellectual Property: (i) that has been conceived or developed by an employee or subcontractor of SIEMENS before SIEMENS performs any Work or Services under this Agreement; (ii) that is conceived or developed by such employee or subcontractor at any time wholly independently of SIEMENS performing the Work under this Agreement; or, (iii) if developed while performing the Work under this Agreement, where the development of Intellectual Property for the benefit of the CLIENT is not expressly identified as a FIM or part of a FIM. SIEMENS Pre-existing Property is included in all reports, notes, calculations, data, drawings, estimates, specifications, manuals, documents, all computer programs, codes and computerized materials prepared by or for SIEMENS.

SIEMENS Product means a product, including Software Product and/or Equipment, offered for sale or license by SIEMENS or its affiliates or subsidiaries and developed prior to performing the Work or SIEMENS rendering services in connection with this Agreement. A SIEMENS Product also includes improvements or modifications to any Equipment and any Software Product developed by SIEMENS or developed as part of the Work, including any SIEMENS Product that is configured or modified for operation at a site specified by the CLIENT. Any information that is provided by the CLIENT and incorporated into a SIEMENS Product is not, by itself, a SIEMENS Product. A compilation of such information and the product of such compilation, however, is a SIEMENS Product.

Software Product means any software that is owned or licensed by SIEMENS or its affiliates and that is either separately deliverable for use in the Equipment or for use in a computer system owned by the CLIENT or delivered as firmware embedded in the Equipment.

Stipulated Savings are a sub-category of Guaranteed Savings that do not require post-FIM implementation measurement and verification because they are agreed upon by the Parties based upon representations made to SIEMENS by the CLIENT

and through the application of generally accepted analytical formulae. As such, Stipulated Savings are agreed upon in advance by the Parties and cannot be changed. When used as a methodology for representing a FIM's energy savings, such methodology is not recognized as a measurement and verification methodology under IPMVP. Therefore, where the IPMVP measurement methodologies are required, a methodology other than Stipulated Savings must be used to calculate energy savings.

Substantial Completion or Substantially Complete means the Work, or any identifiable portion thereof, which is sufficiently complete, in accordance with the provisions of this Agreement relating to the Scope of the Work and Services, Exhibit A, such that the CLIENT will be able to realize from such Work substantially all of the practical benefits intended to be gained therefrom, or otherwise employ the Work or the FIMs for their intended purposes.

Therm is a measure of energy equal to 100,000 BTUs.

Total Guaranteed Savings means the sum of the Savings that are guaranteed for all Annual Periods during the Performance Guarantee Period (inclusive of the Construction Period, if applicable). The Total Guaranteed Savings are reflected in Tables 1.1 and 1.2 in the Performance Assurance, Exhibit C.

Work means collective labor, Equipment and services comprising the FIMs to be performed by SIEMENS, as described in the Scope of Work and Services, Exhibit A.

Work Product Deliverable means the tangible form of a report or drawing specifically developed for, commissioned by and deliverable to the CLIENT in connection with the Work to be performed by SIEMENS under this Agreement.

Article 3
General

3.1 The Parties hereto acknowledge and agree that this Agreement has been negotiated at arm's length and among the Parties equally sophisticated and knowledgeable as to the subject matter of this Agreement. Each party has conferred, or has had the opportunity to confer, with their respective legal counsel. Accordingly, in the event any claim is made relating to any conflict, omission, or ambiguity in this Agreement, no presumption, burden of proof, or persuasion shall be implied by virtue of the fact that this Agreement was drafted by or at the request of a particular party or its legal counsel.

3.2 The CLIENT hereby engages and SIEMENS hereby accepts the engagement to perform and to provide the Work and Services set forth in Exhibit A in accordance with the terms and conditions of this Agreement.

3.3 SIEMENS shall perform the Work as an independent contractor with exclusive control of the manner and means of performing the Work in accordance with the requirements of this Agreement. SIEMENS has no authority to act or make any agreements or representations on behalf of the CLIENT. This Agreement is not intended, and shall not be construed to create, between the CLIENT and SIEMENS, the relationship of principal and agent, joint-venturers, co-partners or any other such relationship, the existence of which is hereby expressly denied. No employee or agent of SIEMENS shall be, or shall be deemed to be, an employee or agent of the CLIENT.

3.4 SIEMENS represents, warrants and covenants to the CLIENT that:

(a) It has all requisite corporate power to enter into this Agreement, and that its execution hereof has been duly authorized and does not and will not constitute a breach or violation of any of SIEMENS organizational documents, any Applicable Law, or any agreements with third parties;

(b) It has done and will continue to do all things necessary to preserve and keep in full force and effect its existence and the Agreement;

(c) This Agreement is the legal, valid and binding obligation of SIEMENS, in accordance with its terms, and all requirements have been met and procedures have been followed by SIEMENS to ensure the enforceability of the Agreement;

(d) To SIEMENS best knowledge, there is no pending or threatened, suit, action, litigation or proceeding against or affecting SIEMENS that affects the validity or enforceability of this Agreement; and,

(e) It is duly authorized to do business in all locations where the Work and Services are to be performed.

3.5 The CLIENT represents, warrants and covenants to SIEMENS that:

(a) It has all requisite corporate power and/or statutory authority to enter into this Agreement, and that its execution hereof has been duly authorized and does not and will not constitute a breach or violation of any of the CLIENT's organizational documents, any Applicable Law, or any agreements with third parties;

(b) It has done and will continue to do all things necessary to preserve and keep in full force and effect its existence and the Agreement;

(c) This Agreement is the legal, valid and binding obligation of the CLIENT, in accordance with its terms, and all requirements have been met and procedures have been followed by the CLIENT to ensure the enforceability of the Agreement;

(d) To the CLIENT's best knowledge, there is no pending or threatened, suit, action, litigation or proceeding against or affecting the CLIENT that affects the validity or enforceability of this Agreement; and,

(e) The CLIENT has consulted with its legal counsel and is relying on the advice of its counsel concerning all legal issues related to this Agreement, and is not relying on SIEMENS in this regard.

Article 4

Performance Guarantee

4.1 The Annual Realized Savings generated during each Annual Period will be no less than the Guaranteed Annual Savings as shown in Tables 1.1 and 1.2 of the Performance Assurance, Exhibit C, subject to the limits in Section 4.8. The measurement and verification calculation methodology for determining the Savings is set forth in the Performance Assurance, Exhibit C.

4.1.1 General. Except as otherwise provided, energy savings will be calculated for each month of each Annual Period as the product of (a) "units of energy saved" (kWh, Therms, GJ, etc.) multiplied by (b) "cost of energy."

(a) Units of energy saved are calculated by 1) assuming the Contracted Baseline has been maintained per Section 4.3 below, and 2) subtracting the then current period measured units of energy consumed from the Baseline units of energy defined in Article 5 of Exhibit C.

(b) Costs of energy are defined in Article 6 of Exhibit C-Utility Rate Structures and Escalation Rates.

4.2 Any future Escalation Rates to be applied to utility, energy or other costs are set forth in Exhibit C. SIEMENS and the CLIENT agree that the Baseline data set forth in Exhibit C is a full and accurate reflection of the existing Facility, equipment, operation, business use and energy usage, and that such Baseline data will be the basis on which all future energy use will be compared in order to determine the Annual Realized Savings.

4.3 SIEMENS and the CLIENT agree that the Contracted Baseline fully described in Exhibit C will represent the new operating and/or equipment profile of the Facility resulting from the FIM implementation. The Performance Guarantee is dependent upon and is subject to the express condition that the CLIENT operates and maintains its Facilities within the Contracted Baseline parameters, as may be adjusted in accordance with the terms herein, during the entire term of the Performance Guarantee Period.

4.4 The CLIENT agrees to notify SIEMENS prior to or within thirty (30) days of CLIENT's knowledge of any Material Change.

4.5 Within thirty (30) days of notice of a Material Change, SIEMENS' discovery of a Material Change and with prompt notice to CLIENT, SIEMENS will either:

(a) Require an adjustment to the Performance Assurance and the Performance Guarantee as a result of the Material Change; or,

(b) Where a commercially reasonable adjustment to the Performance Guarantee is unavailable, terminate both the Performance Assurance and the Performance Guarantee.

4.6 A Performance Guarantee Period savings reconciliation as identified in Section 4.1 will be performed at the end of each Annual Period as follows:

(a) Within ninety (90) days of the Guarantee Date, the Construction Period Savings shall be reconciled and applied to the calculation of the first Annual Period's Annual Realized Savings.

(b) At the conclusion of each Annual Period, SIEMENS will calculate the Annual Realized Savings and compare the calculated amount to the applicable Guaranteed Annual Savings amount.

(c) Where the Annual Realized Savings are less than the Guaranteed Annual Savings, a Savings Shortfall shall be recorded for the applicable Annual Period.

(d) A Savings Shortfall shall be paid by SIEMENS within sixty (60) days following the CLIENT's acceptance of the reconciliation and once paid SIEMENS shall have fulfilled its obligations under the Performance Guarantee for the applicable Annual Period.

4.6.1 As the mutual goal of the Parties is to maximize Savings, if SIEMENS can correct a Savings Shortfall through an operational improvement at no expense or material inconvenience to the CLIENT and without future operational expenses, and the CLIENT declines to allow such operational improvement, then any future Savings Shortfall that the improvement would have corrected will be negated by deeming the value of the Savings Shortfall as Savings achieved and adding the amount of same to the Annual Realized Savings calculations for each Annual Period thereafter.

4.7 The Performance Guarantee is dependent upon and is subject to the express condition that the CLIENT maintains the PASP during the entire Performance Guarantee Period. If the CLIENT fails to maintain, breaches, cancels or otherwise causes the termination of the PASP then; (a) The Performance Guarantee shall terminate immediately and be void and of no force or effect; or, (b) Where termination of the Performance Guarantee acts to render the Agreement in violation of Applicable Law, all Guaranteed Savings thereafter shall be determined to have been achieved and SIEMENS shall have been deemed to have met its Performance Guarantee obligations under this Agreement for each and every Annual Period thereafter without the obligation to provide the CLIENT, or any third-party as the case may be, with any further Annual Performance Assurance Reports.

4.8 The payments and credits based on Savings Shortfalls, if any, are the sole remedy of the CLIENT under this Performance Guarantee. ANY PAYMENTS MADE OR TO BE MADE TO THE CLIENT UNDER THE TERMS OF THIS PERFORMANCE GUARANTEE SHALL NOT EXCEED THE PAYMENTS ACTUALLY MADE BY CLIENT TO EITHER SIEMENS AND/OR A THIRD-PARTY (IN THE EVENT THAT THE CLIENT HAS FINANCED THE TRANSACTION) FOR THE AGGREGATE OF: THE PRICE, AS DEFINED IN EXHIBIT B, ARTICLE 1.1; THE PASP PAYMENTS; THE MSP PAYMENTS, IF ANY; AND, IF APPLICABLE, THE CLIENT'S COST OF FINANCING THE WORK. The CLIENT's cost of financing the Work is the cost of financing calculated either: (a) On the date that the escrow account is funded in accordance with Exhibit B, Article 1.2; or, (b) On the Effective Contract Date if the escrow requirement is expressly waived by SIEMENS.

4.9 The CLIENT represents that all existing equipment that is not installed by SIEMENS under this Agreement but is deemed necessary to achieve the Performance Guarantee, is in satisfactory working condition. Prior to the beginning of the Performance Guarantee Period, SIEMENS will have inspected all such existing equipment and reported any deficiencies to the CLIENT. To the extent that the deficiencies are not remedied by the CLIENT prior to the Guarantee Date, the adverse effect on the ability of the Project to attain the necessary Guaranteed Savings shall be factored into the Annual Performance Assurance Report and, if necessary, the Performance Guarantee shall be adjusted accordingly.

4.10 If the Equipment or the existing equipment is altered or moved by any person (including the CLIENT) other than SIEMENS or a person authorized by SIEMENS, the CLIENT shall immediately notify SIEMENS in writing, and SIEMENS reserves the right to perform a reacceptance test on, or if necessary a re-commissioning of, the system at the CLIENT's expense in order to determine if a Material Change has occurred.

4.11 SIEMENS will have no liability or obligation to continue providing PASP Services or any Guaranteed Savings under the Performance Guarantee in the event that the CLIENT fails to:

(a) Authorize a re-acceptance test or re-commissioning that SIEMENS reasonably deems necessary in order to determine if a Material Change has occurred;

(b) Provide access to any Facility where Work is to be performed;

(c) Service and maintain all Equipment in accordance with the manufacturers' recommendations in order to prevent a Savings Shortfall; or,

(d) Provide SIEMENS with accurate Facility operating information as soon as such information becomes reasonably available to the CLIENT, including energy usage and cost, executed preventive maintenance and repair records, building or equipment additions, and occupancy levels during each Annual Period.

4.12 Unless expressly contrary to Applicable Law, should the CLIENT decide to discontinue the PASP before the end of the Performance Guarantee Period, the CLIENT will give SIEMENS thirty (30) days prior written notice and in such notice indicate that the CLIENT has selected one of the following:

(a) The CLIENT will re-invest the avoided cost of cancellation of the PASP into Facility improvements and services that improve the overall Facility's performance and which improvements and services are implemented by SIEMENS; or,

(b) The CLIENT will pay to SIEMENS 100% of the remaining value left in the PASP Annual Period, as a liquidated damage and not as a penalty, to compensate SIEMENS for SIEMENS' up-front costs and expenses in preparing to perform the PASP as contracted for the Annual Period.

4.13 Unless expressly contrary to Applicable Law, any disputes concerning the calculation of the Annual Realized Savings or changes to the Contracted Baseline that are not resolved by negotiation between the Parties within thirty (30) days of the notice of the dispute, will be resolved by a third-party professional engineering firm which is reasonably acceptable to both SIEMENS and the CLIENT. The determination of such firm will be final and binding upon CLIENT and SIEMENS. SIEMENS and the CLIENT will each be responsible for half of the fees of such firm.

Article 5
Work by SIEMENS

5.1 SIEMENS will perform the Work expressly described in this Agreement and in any work release documents or change orders that are issued under this Agreement and signed by both Parties. The Work performed by SIEMENS shall be conducted in a workmanlike manner and in accordance with industry standards.

5.2 SIEMENS shall perform the Work during its normal hours, Monday through Friday inclusive, excluding holidays, from 7am to 6pm, unless otherwise agreed herein. The CLIENT shall make the Facility available so Work may proceed in an efficient manner.

5.3 SIEMENS is not required to conduct safety, reacceptance or other tests, install new devices or equipment or make modifications to any Equipment unless expressly made a part of the Work identified in the Scope of Work and Services, Exhibit A. Any CLIENT request to change the scope or the nature of the Work or Services must be in the form of a mutually agreed change order, effective only when executed by the Parties.

5.4 All Work Product Deliverables shall become the CLIENT's property upon receipt by CLIENT. SIEMENS may retain file copies of such Work Product Deliverables. If any Instruments are provided to the CLIENT under this Agreement, any such Instruments shall remain SIEMENS' property, including the Intellectual Property conceived or developed by SIEMENS in the Instruments. All SIEMENS' Pre-existing Intellectual Property that may be included in the Deliverables provided to the CLIENT under this Agreement shall also remain SIEMENS property including the SIEMENS Pre-existing Intellectual Property included in the Work Product Deliverables. All Work Product Deliverables and any Instruments provided to the CLIENT are for Permitted Users' use and only for the purposes disclosed to SIEMENS. SIEMENS hereby grants the CLIENT a royalty-free (once payments due under this Agreement are paid to SIEMENS), non-transferable, perpetual, nonexclusive license to use any SIEMENS Pre-existing Intellectual Property solely as incorporated into the Deliverables and SIEMENS' Intellectual Property as incorporated into any Instruments provided to the CLIENT under this Agreement. Under such license, and following agreement to be bound to such separate confidentiality provisions that may exist between the Parties, Permitted Users shall have a right to:

(a) Use, in object code form only, the Software Products included in the Deliverables ("Software Deliverables");

(b) Make and retain archival and emergency copies of such Software Deliverables (subject to any confidentiality provisions) except if the Software Deliverable is embedded in the Equipment; and,

(c) Use all such Deliverables and such Instruments, provided however, the Deliverables and Instruments shall not be used or relied upon by any parties other than Permitted Users, and such use shall be limited to the particular project and location for which the Deliverables are provided. All Deliverables provided to the CLIENT are for Permitted Users' use only for the purposes disclosed to SIEMENS, and the CLIENT shall not transfer them to

others or use them or permit them to be used for any extension of the Work or any other project or purpose, without SIEMENS' express written consent.

5.4.1 Any reuse of such Deliverables or such Instruments for other projects or locations without the written consent of SIEMENS, or use by any party other than Permitted Users will be at Permitted Users' risk and without liability to SIEMENS; and, the CLIENT shall indemnify, to the extent permitted by law, defend and hold SIEMENS harmless from any claims, losses or damages arising therefrom.

5.4.2 In consideration of such license, CLIENT agrees not to reverse engineer any Equipment or Software Product to reconstruct or discover any source code, object code, firmware, underlying ideas, or algorithms of such Equipment or Software Product even to the extent such restriction is allowable under Applicable Law.

5.4.3 Nothing contained in this Agreement shall be interpreted or construed to convey to the CLIENT the pre-existing Intellectual Property rights of any third party incorporated into the Deliverables. CLIENT agrees to take delivery of any Software Deliverables subject to any applicable SIEMENS or third party end-user license agreement accompanying such Software Deliverable.

5.5 SIEMENS shall be responsible for any portion of the Work performed by any subcontractor of SIEMENS. SIEMENS shall not have any responsibility, duty or authority to direct, supervise or oversee any contractor of the CLIENT or their work or to provide the means, methods or sequence of their work or to stop their work. SIEMENS' work and/or presence at the Facility shall not relieve others of their responsibility to the CLIENT or to others.

5.6 SIEMENS warrants that:

(a) Unless otherwise agreed, all Equipment shall be new and of good quality. Until one year from the date the Equipment is installed, all Equipment manufactured by SIEMENS or bearing its nameplate will be free from defects in material and workmanship arising from normal use and service.

(b) Labor for all Work, excluding PASP or MSP Services, is warranted to be free from defects in workmanship for one year after the Work is performed. PASP Services and MSP Services are warranted to be free from defects in workmanship for ninety (90) days after the Services are performed.

5.7 Warranty Limitation:

(a) The limited warranties set forth in Section 5.6 will be void as to, and shall not apply to, any Equipment (i) repaired, altered or improperly installed by any person other than SIEMENS or its authorized representative; (ii) which the CLIENT or a third party subjects to unreasonable or improper use or storage, uses beyond rated conditions, operates other than per SIEMENS or the manufacturer's instructions, or otherwise subjects to improper maintenance, negligence or accident; (iii) damaged because of any use of the Equipment after the CLIENT has, or should have had, knowledge of any defect in the Equipment; or (iv) not manufactured, fabricated and assembled by SIEMENS or not bearing SIEMENS nameplate. However, SIEMENS assigns to the CLIENT, without recourse, any and all assignable warranties available from any manufacturer, supplier, or subcontractor of such Equipment.

(b) Any claim under the limited warranty granted above must be made in writing to SIEMENS within thirty (30) days after discovery of the claimed defect unless discovered directly by SIEMENS. Such limited warranty only extends to the CLIENT and not to any subsequent owner of the Equipment. The CLIENT's sole and exclusive remedy for any Equipment or Services not conforming with this limited warranty is limited to, at SIEMENS' option: (i) repair or replacement of defective components of covered Equipment; (ii) re-performance of the defective portion of the Services; or (iii) to the extent previously paid and itemized, the issuance of a credit or refund for the original purchase price of such defective component or portion of the Equipment or Services.

(c) SIEMENS shall not be required to repair or replace more than the component(s) of the Equipment or the portion of the Work and Services actually found to be defective. SIEMENS' warranty liability shall not exceed the purchase price of such item. Repaired or replaced Equipment or Services will be warranted hereunder only for the remaining portion of the original warranty period.

5.8 THE EXPRESS LIMITED WARRANTIES PROVIDED ABOVE ARE IN LIEU OF AND EXCLUDE ALL OTHER WARRANTIES, STATUTORY, EXPRESS, OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY EXPRESSLY

DISCLAIMED. THE LIMITED EXPRESS WARRANTIES AND REPRESENTATIONS SET FORTH IN THIS AGREEMENT MAY ONLY BE MODIFIED OR SUPPLEMENTED IN A WRITING EXECUTED BY A DULY AUTHORIZED SIGNATORY OF EACH PARTY.

5.9 SIEMENS will not be responsible for the maintenance, repair or replacement of, or Services necessitated by reason of:

(a) Non-maintainable, non-replaceable or obsolete parts of the Equipment, including but not limited to: ductwork, shell and tubes, heat exchangers, coils, unit cabinets, casings, refractory material, electrical wiring, water and pneumatic piping, structural supports, cooling tower fill, slats and basins, etc., unless covered by the warranty provisions herein or otherwise specifically stated herein; or

(b) The CLIENT's or a third-party's negligence, abuse, misuse, improper or inadequate repairs or modifications, improper operation, lack of operator maintenance or skill, corrosion, erosion, improper or inadequate water treatment, electrolytic action, chemical action, failure to comply with manufacturer's operating and environmental requirements, Acts of God, or other reasons beyond SIEMENS' control. Unless expressly agreed in writing, SIEMENS is not responsible for the removal or reinstallation of replacement valves, dampers, or waterflow and tamper switches with respect to pipes and ductwork, including vent or drain system. SIEMENS ASSUMES NO RESPONSIBILITY FOR ANY SERVICE PERFORMED ON ANY EQUIPMENT OTHER THAN THAT PERFORMED BY SIEMENS OR ITS AGENTS.

Article 6
CLIENT Responsibilities

6.1 The CLIENT, without cost to SIEMENS, shall:

(a) Designate a contact person with authority to make decisions for the CLIENT regarding the Work and provide SIEMENS with information sufficient to contact such person in an emergency;

(b) Coordinate the work of contractors under CLIENT's sole control so as not to disrupt the Work and Services proceeding in an efficient manner;

(c) Provide or arrange for access from 7am to 6pm, Monday through Friday and make all reasonable provisions for SIEMENS to enter any Facility where Work is to be performed so that Work may proceed in an efficient manner;

(d) Permit SIEMENS to control and/or operate all building controls, systems, apparatus, equipment and machinery necessary to perform the Work;

(e) Furnish SIEMENS with blueprints, surveys, legal descriptions, waste management plans and all other available information pertinent to the Work and any Facility where the Work is to be performed as may be reasonably requested by SIEMENS. Such plans and blueprints, along with an executed copy of this Agreement, with its Exhibits, shall be kept and maintained in CLIENT's files for a period of fifteen (15) years from the Effective Contract Date;

(f) Furnish SIEMENS with all approvals, permits and consents from government authorities and others as may be required for performance of the Work, except for those SIEMENS has expressly agreed in writing to obtain;

(g) In accordance with Article 11 hereof, promptly notify SIEMENS of all known or suspected Hazardous Materials at the Facility, of any contamination of the Facility by Oil or Hazardous Material, and of any other conditions requiring special care or which may reasonably be expected to affect the Work, and provide SIEMENS with any available documents describing the quantity, nature, location and extent of such materials, contamination or conditions;

(h) Comply with Applicable Law and provide any notices required to be given to any government authorities in connection with the Work, except such notices SIEMENS has expressly agreed in writing to give;

(i) Provide SIEMENS with legally required materials and information (including but not limited to Material Safety Data Sheets) related to all Hazardous Materials located at any Facility where the Work is to be performed;

(j) Furnish SIEMENS with any contingency plans, safety programs and other policies, plans or programs related to any Facility where the Work is to be performed;

(k) Operate, service and maintain all Equipment according to the manufacturer's recommendations including those set forth in the manufacturer's operating manuals or instructions, as well as all requirements of Applicable Law or

of authorities having jurisdiction. The CLIENT shall furnish all needed servicing and parts for said FIMs, which parts shall become part of the FIMs. Such Equipment shall be operated only in the specified operating environment, which shall be supplied by the CLIENT, including without limitation: (1) suitable electrical service, including clean, stable, properly conditioned power, to all Equipment; (2) telephone lines, capacity and connectivity as required by such Equipment; and (3) heat, light, air conditioning or other environmental controls, and other utilities in accordance with the specifications for the Equipment;

(l) Promptly notify SIEMENS of any unusual operating conditions, hours of usage, system malfunctions, installed equipment or building alterations that may affect the Equipment or energy usage or any Services; and,

(m) If applicable, provide and pay for a dedicated voice grade dial-up phone line, or a mutually agreed communication method, and install a terminal block, or an equivalent communication mechanism, in a mutually agreed upon location. All on-line service Equipment (excluding the phone line) will remain the property of SIEMENS unless otherwise stated herein.

6.2 Unless contrary to Applicable Law, and in accordance with the requirements of the Texas Public Records Act, the CLIENT acknowledges that the technical and pricing information contained in this Agreement is confidential and proprietary to SIEMENS and agrees not to disclose it or otherwise make it available to others without SIEMENS' express written consent.

6.3 The CLIENT acknowledges that it is now and shall at all times remain in control of the Facility. Except as expressly provided herein, SIEMENS shall not be responsible for the adequacy of the health or safety programs or precautions related to the CLIENT's activities or operations, the CLIENT's other contractor(s), the work of any other person or entity, or Facility conditions. SIEMENS shall not be responsible for inspecting, observing, reporting or correcting health or safety conditions or deficiencies of the CLIENT or others at the Facility. So as not to discourage SIEMENS from voluntarily addressing health or safety issues while at the Facility, in the event SIEMENS does address such issues by making observations, reports, suggestions or otherwise, the CLIENT shall not hold, or attempt to hold, SIEMENS liable or responsible on account thereof.

Article 7
Changes and Delays

7.1 As the Work is performed, Applicable Law or conditions may change, or circumstances outside SIEMENS' reasonable control may develop, which would require SIEMENS to expend additional costs, effort or time to complete the Work, in which case SIEMENS will notify the CLIENT and subject to Client's agreement, an equitable adjustment will be made to SIEMENS' compensation and the time for performance. In the event such changes require the Work to be suspended or terminated, SIEMENS shall be compensated for Work previously performed and for costs reasonably incurred in connection with the suspension or termination.

7.2 Either party may request additions, deletions, modifications or changes to the Work. Any such requests shall only become effective upon execution of a written agreement by authorized representatives of both Parties.

7.3 SIEMENS may, in its sole discretion, substitute alternative parts, goods or equipment in the performance of the Work, provided that any such substitution shall be of an equal or better quality.

7.4 SIEMENS shall not be responsible for loss, delay, injury, damage or failure of performance that may be caused by circumstances beyond its control, including but not restricted to acts or omissions by the CLIENT or its employees, agents or contractors, Acts of God, war, civil commotion, acts or omissions of government authorities, fire, theft, corrosion, flood, water damage, lightning, freeze-ups, strikes, lockouts, differences with workmen, riots, explosions, quarantine restrictions, delays in transportation, or shortage of vehicles, fuel, labor or materials. In the event of such delay or failure, the time for performance shall be extended by a period equal to the time lost plus a reasonable recovery period and the compensation shall be equitably adjusted to compensate for additional costs SIEMENS incurs due to such delay. If any such delay exceeds sixty (60) days, SIEMENS may terminate this Agreement upon three (3) days notice to the CLIENT and the CLIENT shall promptly pay SIEMENS for the allocable portion of the Work completed, for any costs and expenses of termination, and for any loss or damage incurred with respect to materials, equipment, tools and machinery, including reasonable overhead and profit.

Article 8
Compensation

8.1 The aggregate amount paid by CLIENT provides for and is solely in consideration of the Scope of Work and Services described in Exhibit A, and is detailed in Exhibit B.

8.2 SIEMENS will invoice the CLIENT in accordance with the schedules set forth in Exhibit B. Unless otherwise agreed in writing, invoices are due and payable upon receipt by the CLIENT. If the CLIENT disagrees with any portion of an invoice, it shall notify SIEMENS in writing of the amount in dispute and the reason for its disagreement within 21 days of receipt of the invoice, and shall pay the portion not in dispute.

8.3 SIEMENS may suspend or terminate the Work or Services at any time if payment is not received when due. In such event, SIEMENS shall be entitled to compensation for the Work or Services previously performed and for costs reasonably incurred in connection with the suspension or termination provided that Siemens was not in breach of any provision of this Agreement at the time of suspension or termination.

8.4 On amounts not paid within thirty (30) days of invoice date, the CLIENT shall pay interest from invoice date until payment is received at the lesser of 12% per annum or the maximum rate allowed by law. The CLIENT shall reimburse SIEMENS for SIEMENS' costs and expenses (including reasonable attorney and witness fees) incurred for collection under this Agreement.

8.5 Except to the extent expressly agreed herein, SIEMENS' fees do not include any taxes, excises, fees, duties or other government charges related to the Work or Services. The CLIENT shall pay such amounts or reimburse SIEMENS for any such amounts SIEMENS pays to the extent such charges are lawfully due and payable by CLIENT and have been paid or incurred by SIEMENS in furtherance thereof. If the CLIENT claims that the Work or Services is subject to a tax exemption or direct payment permit, it shall provide SIEMENS with a valid exemption certificate or permit and, unless specifically prohibited by law, shall indemnify, defend and hold SIEMENS harmless from any taxes, costs and penalties arising out of the use or acceptance of same.

8.6 All other work or services requested by the CLIENT, including but not limited to the following, shall be separately billed or surcharged on a time and materials basis:

(a) Emergency services, if inspection does not reveal any deficiency covered by the Scope of Work and Services, Exhibit A;

(b) Work and/or services performed at times other than during SIEMENS' normal working hours, unless otherwise agreed to in Exhibit A; or

(c) Work and/or services performed on equipment not covered by the Scope of Work and Services, Exhibit A.

Article 9
Acceptance

9.1 When SIEMENS believes that all or an independent definable phase or portion of the Work is Substantially Complete, SIEMENS will submit a Certificate of Substantial Completion to the CLIENT which shall be subject to the following:

(a) If the CLIENT concurs that the described portion of the Work as performed is Substantially Complete, the CLIENT will sign the Certificate of Substantial Completion and return it to SIEMENS;

(b) A Certificate of Substantial Completion may include, as an attachment to it, an Outstanding Items List prepared by SIEMENS;

(c) If the CLIENT does not concur that the Work is Substantially Complete, then, within five (5) business days of receiving the Certificate of Substantial Completion, the CLIENT shall notify SIEMENS in writing of the reasons it believes the Work is not Substantially Complete;

(d) If SIEMENS disagrees with the CLIENT as to whether the Work is Substantially Complete, SIEMENS shall notify the CLIENT in writing of a dispute and such dispute shall be resolved in accordance with Section 9.3 herein;

(e) If, within five (5) business days of receiving the Certificate of Substantial Completion the CLIENT fails to sign the Certificate, and within the same period the CLIENT's Representative does not deliver to SIEMENS a written notice of the reasons the CLIENT believes that the Work is not Substantially Complete, then in the mutual interests of the Project proceeding in a timely manner, the CLIENT will be deemed to have agreed to, signed and returned the Certificate of Substantial Completion.

9.2 After the CLIENT signs and returns, or is deemed to have signed and returned to SIEMENS all of the Certificates of Substantial Completion relating to the Work, and after SIEMENS corrects and completes all of the items on all of the Outstanding Items Lists, if any, SIEMENS will submit to the CLIENT a Certificate of Final Completion which shall be subject to the following:

(a) If the CLIENT concurs that all of the items on all of the Outstanding Items Lists have been completed or corrected, the CLIENT will indicate its final acceptance of the Work by signing the Certificate of Final Completion and returning it to SIEMENS;

(b) If the CLIENT does not concur that all of the items on all of the Outstanding Items Lists have been completed or corrected, then the CLIENT shall, within five (5) business days of receiving the Certificate of Final Completion, identify in writing the items that, it believes, were not completed or corrected;

(c) If SIEMENS disagrees that the items identified by the CLIENT have not been completed or corrected, SIEMENS shall notify the CLIENT in writing of a dispute and such dispute shall be resolved in accordance with section 9.3 herein;

(d) If, within five (5) business days of receiving a Certificate of Final Completion, the CLIENT fails to sign that Certificate, and, within the same period the CLIENT's Representative does not deliver to SIEMENS a written notice identifying the items on the Outstanding Items List(s) that, the CLIENT believes, were not completed or corrected, then the CLIENT will be deemed to have agreed to and signed and returned the Certificate of Final Completion.

9.3 Any disputes concerning the Substantial Completion or the Final Completion of the Work will be resolved by submitting the issue to a third party professional engineering firm and which is reasonably acceptable to both SIEMENS and the CLIENT. The determination of this firm with respect to Final Completion or Substantial Completion will be final and binding upon the Parties. SIEMENS and the CLIENT shall share equally the costs or fees for such firm in connection with such dispute resolution process.

Article 10
Insurance and Allocation of Risk

10.1 SIEMENS shall maintain, at SIEMENS' expense, the following insurances while performing the Work and shall add the CLIENT as an "Additional Insured" to each policy that is referenced in subsections (c) through and including (e) hereof:

(a) Workers' Compensation at the statutory amounts and limits as prescribed by Applicable Law.

(b) Employer's Liability insurance (and, where applicable, Stop Gap extended protection endorsement) limits of liability shall be:

- $1,000,000 per occurrence
- $1,000,000 Disease Policy
- $1,000,000 Each Employee

(c) SIEMENS shall carry, in the Occurrence Coverage Form, Comprehensive General Liability or Commercial General Liability, insurance covering SIEMENS' operations and providing insurance for bodily injury and property damage with limits of liability stated below and including coverage for:

- Products and Completed Operations
- Contractual Liability insuring the obligations assumed by SIEMENS in this Agreement
- Broad Form Property Damage (including Completed Operations)
- Explosion, Collapse and Underground Hazards
- Personal Injury Liability:
  — Limits of liability shall be $1,000,000 per occurrence/aggregate

(d) SIEMENS shall carry Automobile Liability Insurance in the Occurrence Coverage Form covering all owned, hired and non-owned automobiles and trucks used by or on behalf of SIEMENS providing insurance for bodily injury liability and property damage liability for the limits of:

- $1,000,000 per occurrence/aggregate

(e) SIEMENS shall carry Excess Liability Insurance in the Occurrence Coverage Form with limits of:

- $5,000,000 per occurrence/aggregate

10.2 The CLIENT will either maintain at its own expense, or self-insure for the equivalent risks, property insurance written on a builder's "all-risk" or equivalent policy form in an amount no less than the Price identified in Exhibit B, Article 1.1, plus the value of subsequent modifications and cost of materials supplied or installed by others, on a replacement cost basis without optional deductibles. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by SIEMENS, until final payment has been made to SIEMENS or no person or entity other than the CLIENT has an insurable interest in the property, whichever is later. The policy form shall include without limitation, insurance against the perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood, windstorm, falsework, testing and start-up, rebuilding and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for SIEMENS' services and expenses required as result of such insured loss. If the insurance requires deductibles or retentions, the CLIENT shall pay costs not covered because of such deductibles or retentions. This insurance shall cover portions of the Work off the Facility, and also portions of the Work in transit. Partial occupancy or use shall not commence unless the insurance company providing this insurance has consented to such partial occupancy or use by endorsement for otherwise. The CLIENT shall purchase and maintain boiler and machinery insurance which shall specifically cover such insured objects during installation and until Acceptance by the CLIENT. The insurance required by this section shall include the interests of the CLIENT, SIEMENS, subcontractor and sub-subcontractor in the Work. SIEMENS shall be included as an additional insured on each such insurance coverage. The CLIENT and SIEMENS waive all rights against each other and any of their subcontractors, sub-subcontractors, agents and employees for damages caused by fire or other causes of loss to the extent covered by the insurance required by this section and for any other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by the CLIENT as fiduciary. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged. Insurance certificates shall be furnished upon request.

10.3 Title and risk of loss of materials and Equipment furnished by SIEMENS shall pass to the CLIENT upon their delivery to the Facility, and the CLIENT shall be responsible for protecting them against theft and damage.

10.4 SIEMENS will indemnify the CLIENT from and against losses, claims, expenses and damages (including reasonable attorney's fees) for personal injury or physical damage to property (collectively "Damages"). Such indemnification shall be solely to the extent the Damages are caused by or arise directly from SIEMENS or its employees', consultants' or agents' negligent acts or omissions or willful misconduct in connection with SIEMENS' performance of the Work or Services. SIEMENS' obligations under this indemnity shall not extend to Damages arising out of or in any way attributable to the negligence of the CLIENT or its agents, contractors or employees. SIEMENS reserves the right to control the defense and settlement of any claim for which SIEMENS has an obligation to indemnify hereunder. UNLESS CONTRARY TO APPLICABLE LAW, IN NO EVENT SHALL THE CLIENT OR SIEMENS BE LIABLE UNDER THIS INDEMNITY OR OTHERWISE UNDER THIS AGREEMENT FOR SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE, EXEMPLARY OR CONSEQUENTIAL DAMAGES, INCLUDING COMMERCIAL LOSS, LOSS OF USE, OR LOST PROFITS, HOWEVER CAUSED, EVEN IF SIEMENS OR THE CLIENT HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES AND, IN ANY EVENT, UNLESS CONTRARY TO APPLICABLE LAW, SIEMENS' AGGREGATE LIABILITY FOR ANY AND ALL CLAIMS, LOSSES OR EXPENSES ARISING OUT OF THIS AGREEMENT, OR OUT OF ANY GOODS OR SERVICES FURNISHED UNDER THIS AGREEMENT, WHETHER BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY, AGENCY, WARRANTY, TRESPASS, INDEMNITY OR ANY OTHER THEORY OF LIABILITY, SHALL BE LIMITED TO THE LESSER OF $1,500,000 OR THE TOTAL COMPENSATION RECEIVED BY SIEMENS FROM THE CLIENT UNDER THIS AGREEMENT. The preceding limit shall not apply to the CLIENT's remedy under the Performance Guarantee as such is limited by Section 4.8.

10.5 As to Patents and Copyrights:

(a) SIEMENS will, at its own expense, defend or at its option settle any suit or proceeding brought against the CLIENT in so far as it is based on an allegation that any Work (including parts thereof), or use thereof for its intended purpose, constitutes an infringement of any United States patent or copyright, if SIEMENS is promptly provided notice and given authority, information, and assistance in a timely manner for the defense of said suit or proceeding. SIEMENS will pay the damages and costs awarded in any suit or proceeding so defended.

SIEMENS will not be responsible for any settlement of such suit or proceeding made without its prior written consent. In case the Work, or any part thereof, as a result of any suit or proceeding so defended is held to constitute infringement or its use by the CLIENT is enjoined, SIEMENS will, at its option and its own expense, either: (i) procure for the CLIENT the right to continue using said Work; (ii) replace it with substantially equivalent non-infringing Work; or (iii) modify the Work so it becomes non-infringing.

(b) SIEMENS will have no duty or obligation to the CLIENT under Section 10.5(a) to the extent that the Work is: (i) supplied according to the CLIENT's design or instructions, wherein compliance therewith has caused SIEMENS to deviate from its normal course of performance; (ii) modified by the CLIENT or its contractors after delivery; or, (iii) combined by the CLIENT or its contractors with items not furnished hereunder, and by reason of said design, instruction, modification, or combination, a suit is brought against the CLIENT. If by reason of such design, instruction, modification or combination, a suit or proceeding is brought against SIEMENS, unless expressly prohibited by law, the CLIENT shall protect SIEMENS in the same manner and to the same extent that SIEMENS has agreed to protect the CLIENT under the provisions of Section 10.5(a) above.

(c) THIS SECTION 10.5 IS AN EXCLUSIVE STATEMENT OF ALL THE DUTIES OF THE PARTIES RELATING TO PATENTS AND COPYRIGHTS, AND DIRECT OR CONTRIBUTORY PATENT OR COPYRIGHT AND OF ALL THE REMEDIES OF THE CLIENT RELATING TO ANY CLAIMS, SUITS, OR PROCEEDINGS INVOLVING PATENTS AND COPYRIGHTS. Compliance with Section 10.5 as provided herein shall constitute fulfillment of all liabilities of the Parties under the Agreement with respect to the intellectual property indemnification.

10.6 The Parties acknowledge that the price for which SIEMENS has agreed to perform the Work and obligations under this Agreement was calculated based upon the foregoing allocations of risk, and that each Party has expressly relied on and would not have entered into this Agreement but for such allocations of risk.

Article 11
Hazardous Materials Provisions

11.1 The Work does not include directly or indirectly performing or arranging for the detection, testing, handling, storage, removal, treatment, transportation, disposal, monitoring, abatement or remediation of any contamination of any Facility at which Work is performed and any soil or groundwater at the Facility by petroleum or petroleum products (collectively called "Oil"), asbestos, PCBs or hazardous, toxic, radioactive or infectious substances, including any substances regulated under RCRA, CERCLA or any other Applicable Law (collectively called "Hazardous Materials"), including without limitation: ionization smoke detectors, ballasts, mercury bulb thermostats, used oil, contaminated filters, contaminated absorbents, and refrigerant. Except as expressly disclosed pursuant to Section 11.2, the CLIENT represents and warrants that, to the best of its knowledge following due inquiry, there are no Hazardous Materials or Oil present where the Work is to be performed. SIEMENS will notify the CLIENT immediately if it discovers or reasonably suspects the presence of any previously undisclosed Oil or Hazardous Material. All Services have been priced and agreed to by SIEMENS in reliance on the CLIENT's representations as set forth in this Article. The discovery or reasonable suspicion of Hazardous Materials or hazardous conditions at a Facility where SIEMENS is to perform Work, or of contamination of the Facility by Oil or Hazardous Materials not previously disclosed pursuant to Section 11.2, shall entitle SIEMENS to suspend the Work immediately, subject to mutual agreement of terms and conditions applicable to any further Work, or to terminate the Work and to be paid for Work previously performed.

11.2 The CLIENT warrants that, prior to the execution of the Agreement, it notified SIEMENS in writing of any and all Oil or Hazardous Materials, to the best of its knowledge following due inquiry, known to be present, potentially present or likely to become present at the Facility and provided a copy of any Facility safety policies and information, including but not limited to lock-out and tag procedures, chemical hygiene plan, material safety data sheets, and other items covered or required to be disclosed or maintained by Applicable Law.

11.3 Regardless of whether Oil or Hazardous Material was disclosed pursuant to Section 11.2, the CLIENT shall be solely responsible for properly testing, abating, encapsulating, removing, disposing, remedying or neutralizing such Oil or Hazardous Materials, and for the costs thereof. Even if an appropriate change order has been entered into pursuant to Section 11.1, SIEMENS shall have the right to stop the Work until the Facility is free from Oil or Hazardous Materials. In such event, SIEMENS will receive an equitable extension of time to complete the Work, and compensation for delays caused by Oil or Hazardous Materials remediation. In no event shall SIEMENS be required or construed to take title, ownership or responsibility for such Oil or Hazardous Materials. The CLIENT shall sign any required waste manifests in

conformance with all government regulations, listing the CLIENT as the generator of the waste. If someone other than the CLIENT is the generator of the waste, the CLIENT shall arrange for such other person to sign such manifests.

11.4 Except where expressly prohibited by Applicable Law and only to the extent permitted by law, for separate consideration of $10 and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the CLIENT shall indemnify, defend and hold SIEMENS harmless from and against any damages, losses, costs, liabilities or expenses (including attorneys' fees) arising out of any Oil or Hazardous Materials or from the CLIENT's breach of, or failure to perform its obligations under this Article.

11.5 For purposes of this Article 11, in the context of the phrase "to the best of its knowledge following due inquiry"; "knowledge" means actual awareness of the facts by the CLIENT's directors, officers, employees or agents, or the presence of relevant information contained in the CLIENT's books or records; and, "due inquiry" means inquiry of those persons under the CLIENT's control who should have knowledge of the subject matter of such inquiry.

Article 12
Miscellaneous Provisions

12.1 Notices between the Parties shall be in writing and shall be hand-delivered or sent by certified mail, express courier, or acknowledged telefax properly addressed to the appropriate party. Any such notice shall be deemed to have been received when delivered in-person or when sent by telefax, or five (5) business days subsequent to deposit in the U.S. mails, or one (1) day after deposit with express courier.

12.2 Neither the CLIENT nor SIEMENS shall assign or transfer any rights or obligations under this Agreement, except that either party may assign this Agreement to its affiliates and SIEMENS may use subcontractors in the performance of the Work or Services. Nothing contained in this Agreement shall be construed to give any rights or benefits to anyone other than the CLIENT and SIEMENS without the express written consent of both Parties.

12.3 This Agreement shall be governed by and construed in accordance with the laws of the state or commonwealth within which the Facilities are located.

12.4 This Agreement and all provisions of this Agreement allocating responsibility or liability between the Parties shall survive the completion of the Work, the Services, and the termination of this Agreement.

12.5 Unless contrary to Applicable Law and with the exception of disputes arising under Article 4 or Article 9, all disputes not resolved by negotiation between the Parties shall be resolved in accordance with the Commercial Rules of the American Arbitration Association in effect at that time, except as modified herein. All disputes shall be decided by a single arbitrator. A decision shall be rendered by the arbitrator no later than nine months after the demand for arbitration is filed, and the arbitrator shall state in writing the factual and legal basis for the award. No discovery shall be permitted. The arbitrator shall issue a scheduling order that shall not be modified except by the mutual agreement of the Parties. Except as provided in Article 8.4, the arbitrator shall have no authority to award, and shall not award, attorneys' fees. Judgment may be entered upon the award in the highest state or federal court having jurisdiction over the matter.

12.6 SIEMENS' performance of the Work and Services is expressly conditioned on the Parties assenting to all of the terms of this Agreement, notwithstanding any different or additional terms contained in any writing at any time submitted or to be submitted by a Party to the other Party relating to the Work or Services, even if signed by the Parties, unless the written statement expressly indicates that such terms supersede the terms of this Agreement

12.7 Any provision of this Agreement found to be invalid, unlawful or unenforceable by a court of law shall be ineffective to the extent of such invalidity, and deemed severed herefrom, without invalidating the remainder of this Agreement. All other provisions hereof shall remain in full force and effect.

12.8 The waiver by a party of any breach by the other party of any term, covenant or condition hereof shall not operate as a waiver of any subsequent breach hereof. No waiver shall operate or be effective unless made in writing and executed by the party to be bound thereby.

12.9 In the event that Applicable Law or the CLIENT requires that SIEMENS procure a performance bond and/or a payment bond, SIEMENS shall provide a performance and payment bond in the amount of the Contract price defined in Exhibit B. The performance and payment bond will solely apply to the Work performed during the Construction Period and to the required statutory lien filing period thereafter. The performance and payment bond will not apply to any of the obligations included in the Performance Assurance, Exhibit C. Furthermore, the CLIENT's funding source may be named as "Co-Obligee" on the performance bond if so requested by the CLIENT.

Article 13
Maintenance Services Program

13.1 If applicable, the scope of Services provided by SIEMENS for the Maintenance Services Program is stated in Exhibit A.

13.2 The CLIENT represents that all equipment not installed by SIEMENS under this Agreement and subject to a MSP is in satisfactory working condition. SIEMENS will have inspected all such equipment within the first thirty (30) days of MSP commencement or no later than the first scheduled inspection. Testing and inspection will not be deemed to be complete until all such equipment has been so tested and inspected.

13.3 If the equipment is altered or moved by any person, including the CLIENT, other than SIEMENS or a person authorized by SIEMENS, the CLIENT shall immediately notify SIEMENS in writing, and SIEMENS reserves the right to perform a reacceptance test on, or if necessary a re-commissioning of, the system at the CLIENT's expense.

13.4 If SIEMENS reasonably determines as a result of such inspection and/or testing that any equipment requires repair or replacement, the CLIENT will be so notified and shall take corrective action within thirty (30) days, or such equipment shall be removed from coverage hereunder without further action by the Parties. SIEMENS is not liable or responsible for the continued testing, maintenance, repair, replacement or operating capabilities of any portion of the equipment until it has been inspected and/or tested and has been, if necessary, restored to an acceptable initial condition at the CLIENT's sole expense. Any services provided by SIEMENS in the course of such restoration will be separately charged on a time and materials basis, and not included in fees paid hereunder. If individual items of equipment cannot, in SIEMENS' sole determination, be properly repaired or replaced due to age, obsolescence, lack of availability of refrigerant gas, halon gas, necessary parts, materials, compatibility or otherwise, or as a result of excessive wear or deterioration, SIEMENS may, within ten (10) days of such inspection, give written notice that it is withdrawing such items from coverage under the MSP and adjust the MSP payments due hereunder accordingly.

13.5 If the removal of equipment from coverage would compromise or impair the integrity of the Work, Services or compliance with law of any system, then SIEMENS will provide a written statement thereof for execution by the CLIENT. The CLIENT's failure to execute such statement within ten (10) days will void the MSP and release SIEMENS from any further obligations with respect to the MSP.

13.6 If the MSP scope of Services provides for equipment maintenance, repairs and/or replacements of equipment by SIEMENS, those Services are limited to restoring the proper working condition of such equipment. SIEMENS will not be obligated to provide replacement equipment that represents significant capital improvement compared to the original. Exchanged components become the property of SIEMENS, except Hazardous Materials, which under all circumstances remain the property and responsibility of the CLIENT.

Article 1: Scope of Work

1.1 **Description:** SIEMENS shall provide the following measures, which are further described in Section 1.2 (collectively, the "Work"):

- Water Meter Replacement;
- Advanced Meter Infrastructure (AMI);
- Enhanced Water Management Dashboard;
- WWTP Aeration System Improvements;
- Digester MCC Replacement;
- Digester Blower Replacement;
- Main Lift Station Rehabilitation;
- Gaseous Disinfection;
- Digester / Thickener Rehabilitation;
- RAS Pump Replacement;
- WAS Flow Meter and Control Valve Replacement;

FIMs by Facility Names & Locations:

Infrastructure Improvements	Facility # 101 Waste Water Treatment Plant	Facility # 102 City Wide Improvements
Water Meter Replacement		X
Advanced Meter Infrastructure (AMI)		X
Enhanced Water Management Dashboard		X
Aeration System Improvements	X	
Digester MCC Replacement	X	
Digester Blower Replacement	X	
Mail Lift Station Rehabilitation	X	
Gaseous Disinfection Conversion	X	
Digester / Thickener Rehabilitation	X	
RAS Pump Replacement	X	
WAS Automation Replacement	X	

1.2 *Specific Elements*: The Work shall include the following:

1.2.1 Replacement of Water Meters with Advance Meter Infrastructure (AMI)

In accordance with the CLIENT's selection of meter manufacture, SIEMENS will install new Neptune water meters, and any required modifications to existing meter boxes, lids, etc. as outlined below. Meter quantities and types, as determined from CLIENT database on April 20, 2016 are listed in Table 1.1.

Table 1.1 – Water Meter Breakdown

Qty	Size	Type	Description
5400	3/4" SL	Neptune T-10 PD Meter with R900i	Fixed Base Water Meter and Transmitter Replacement
2125	1"	Neptune T-10 PD Meter with R900i	Fixed Base Water Meter and Transmitter Replacement
45	1.5"	Neptune T-10 PD Meter with R900i	Fixed Base Water Meter and Transmitter Replacement
78	2"	Neptune T-10 PD Meter with R900i	Fixed Base Water Meter and Transmitter Replacement
1	2"	Neptune HPT Turbine Meter with R900i	Fixed Base Water Meter and Transmitter Replacement
5	2"	Neptune Compound Meter with R900i	Fixed Base Water Meter and Transmitter Replacement
1	3"	Neptune HPT Turbine Meter with R900i	Fixed Base Water Meter and Transmitter Replacement
6	3"	Neptune Compound Meter with R900i	Fixed Base Water Meter and Transmitter Replacement
2	4"	Neptune HPT Turbine Meter with R900i	Fixed Base Water Meter and Transmitter Replacement
17	4"	Neptune Compound Meter with R900i	Fixed Base Water Meter and Transmitter Replacement
4	6"	Neptune Compound Meter with R900i	Fixed Base Water Meter and Transmitter Replacement

SIEMENS shall also include the following items and/or services in locations where it determines that the existing equipment/infrastructure is insufficient for use in accordance with this Scope of Work and applicable specifications:

- Meter box and/or lid replacement for meters 2" and below;
- Dig up box for new box install ;
- New meter lid ;
- Dig up box and reposition for install;
- Cut concrete/asphalt to access meter within two feet of meter box;
- Replace curb stop;
- Repair line breaks within a 2 feet radius of meter;
- Strainers

It is understood by SIEMENS that the components of the AMI system will properly fit inside of CLIENT's meter pit environment where applicable unless lay-length or other rework is specifically stated in the scope of work. Any rework to ensure AMI components will properly fit in meter pit environment is the responsibility of SIEMENS.

Where applicable, SIEMENS will provide meter boxes and lids in accordance with the terms of this Agreement and will be of substantially similar material and quality as the current meter boxes and lids. Due to a significant number of small metal meter boxes, found during the meter testing phase, that were deemed too small to house the proposed meters, SIEMENS and the CLIENT have agreed to use a Dallas Specialties DS1200 meter boxes to replace existing metal meter box. The DS1200 will be also be used to replace existing damaged meter boxes where applicable. SIEMENS has included box replacements of up to 40% of total meters 2" and smaller population.

CLIENT shall be responsible for the testing and approval of all meter lids, meter boxes, and associated locking mechanisms installed during this project. SIEMENS shall not be required to correct and/or repair and deficiencies for meter lid characteristics that are unwanted or otherwise unexpected including specific gravity, propensity to float, load-bearing properties, impact bearing properties or the like. Any such deficiencies shall be corrected or repaired by CLIENT. Locking meter lids are not included as part of the scope of this project.

SIEMENS will install the meter quantities listed in Table 1.1. If any changes in water meter quantities are discovered prior to installation, SIEMENS reserves the right to develop and price these additional changes to the Scope of Work and will provide CLIENT with revised cost and savings calculations.

In order to verify meter quantities and to maintain system integrity for measurement and verification purposes, after substantial completion CLIENT shall allow SIEMENS reasonable access to its meter database as long as a performance assurance agreement exists between the CLIENT and SIEMENS. If the performance assurance agreement is cancelled by the CLIENT, the CLIENT reserves the right to rescind SIEMENS access to its water meter database.

SIEMENS will be responsible for line breaks within two (2) feet of the meter set, while the CLIENT will be responsible for line breaks outside of this area, unless the break results from the negligent acts of SIEMENS in which SIEMENS will be responsible for said repair.

The final reading of the old meter removed will be provided from the direct read dial face of the meter. If the reading is illegible due to dial face condition, SIEMENS will break the glass of the dial face to obtain the final reading.

Meter Access Procedure for the Project is outlined below:

- SIEMENS will attempt to access the meter a total of three (3) times with a minimum of 24 hours between each access attempt.
- On each of the three access attempts, SIEMENS will "tag" the door with information on how to contact SIEMENS to allow access to meter in order to perform work.
- Each attempt to access the meter will be documented with a date and time – recorded electronically into the SIEMENS database
- After the third documented attempt, SIEMENS will submit inaccessible account to CLIENT for access assistance.
- CLIENT will take reasonable actions, including phone calls, PR announcements, and finally discontinuing water service, as a means to gain access to the inaccessible facility
- If the account remains inaccessible for a period not to exceed 15 business days following submission to CLIENT, the account will be deemed permanently inaccessible and removed from the project scope.

SIEMENS will coordinate closely and routinely with the CLIENT staff for scheduling and workflow as each route is installed. Install crews will document the customer account number, service address, serial number, size, and the final reading from the existing

register prior to removal; and will document the new meter serial number, new meter size, and GPS latitude and longitude. SIEMENS will also configure, program and verify communication of each new set of meters upon installation. Unless specified otherwise in this contract, GPS coordinates will typically be accurate within consumer grade equipment specifications or sub-meter accuracy, which is typically within 9 to 10 feet. As each route is completed, the commissioning and acceptance plan will be performed to verify proper performance.

All removed meters shall remain property of CLIENT, and will be placed in a storage location as mutually agreed between CLIENT and SIEMENS, at CLIENT'S sole risk. CLIENT shall provide bins/storage containers for removed meters and meters will be transferred into provided bins on a daily basis and stored on Client's property.

A successful and complete meter installation is defined as any meter installed to manufacturer specifications where the data has been accurately transferred into utility billing database and reads one or more times electronically on the reading network. At the point of a successful and complete meter installation, the installation labor warranty begins and system benefits may be realized.

Upon Substantial Completion of each route in CLIENT's system, SIEMENS shall notify CLIENT in writing and request a Certificate of Substantial Completion for that route in accordance with Article 9 of the Agreement.

Exclusions:

- Any existing leaks found prior to beginning the meter retrofit;
- Any leaks which occur outside of the 2' radius from the meter;
- Any repairs or upgrades to the existing system required by the applicable inspecting authority. In the event Siemens is required to perform such work, it shall be considered an extra and subject to additional compensation to Siemens.

1.2.2 Automatic Metering Infrastructure Upgrade

SIEMENS will provide all Equipment, material, and labor to install the following:

Install new Neptune ARB® Fixed Base R900i System and provide material and labor to make the system functional. The new fixed base system will include the following (see Table 1.2):

- Three (3) Neptune R4900 Gateways
- One (1) Monopole Installation;
- Neptune N_Sight 5.0 Software;
- One (1) Trimble 1050b Handheld with Cradle;
- One (1) Belt clip Transceiver;
- One (1) Mobile MRX920 Mobile Data Collector;
- Training and Implementation;

Table 1.2 – Collector Locations

Name	Coordinates	Antenna Height (ft)	Description

Central Water Tower	29.702299, -95.468326	130 ft.	Elevated Storage Tank
Feld Park Water Tower	29.711397, -95.457433	130 ft.	Elevated Storage Tank
Public Works Monopole	29.690508 , -95.450908	75 ft.	Monopole

For base station and new data collector sites, SIEMENS shall coordinate with installer and any utility companies as required prior to digging footings. CLIENT shall provide access for digging equipment and SIEMENS shall temporarily remove any fencing as required to provide adequate space to installation of base station.

All required electrical work, mass data transfer and system commissioning is included in this scope. Global positioning system coordinates will be provided for each data collector location. Unless specified otherwise in this contract, GPS coordinates will typically be accurate within consumer grade specifications or sub-meter accuracy, which is typically within 9 to 10 feet.

The parties acknowledge that once the Neptune Gateways are installed and communicating properly with AMI server, SIEMENS shall notify CLIENT in writing and request a Certificate of Substantial Completion for AMI infrastructure in accordance with Article 9 of the Agreement.

The parties acknowledge that if a meter or group of meters installed by SIEMENS has consistent communication problems with the data collectors installed by SIEMENS during the one-year warranty period, then SIEMENS shall be required to resolve the issue, including any costs or additional equipment required to ensure proper communication with data collectors.

The parties acknowledge that all meter data will be required to properly communicate with AMI system as well as CLIENT's billing software to ensure proper functionality of installed AMI system and water meters. However, Siemens will not be responsible for pre-existing defects or deficiencies in CLIENT'S computer network, billing software or system.

CLIENT acknowledges that Neptune will host all meter data on a cloud-based server and that this hosting service requires acceptance of Neptune's terms and conditions and an annual service fee to be paid to Neptune by CLIENT.

SIEMENS shall also include:

- Interface program to facilitate communication between Neptune ARB N_Sight Software and CLIENT's Incode version 9 Billing System;
- All required integration and setup of data transfer;
- Turnkey AMI system start up/testing/commissioning;
- Neptune System Setup and Training
    - Two days of hands-on training for CLIENT personnel;
    - In-field shadow of SIEMENS personnel for troubleshooting training;
- Installation of backhaul communications;
- Electric power connection to data collectors.

Exclusions:

- Deficiencies in CLIENT'S existing billing system
- Any additional new customer accounts the CLIENT acquires;

- Any ongoing service fees charged by manufactures of software, meters, or AMI system;
- Any ongoing backhaul communication fees, such as monthly cellular fees;
- Any deficiencies in electrical system at sites chosen for collectors, including proper grounding.
- Any repairs or upgrades to the existing system required by the applicable inspecting authority. In the event Siemens is required to perform such work, it shall be considered an extra and subject to additional compensation to Siemens.

1.2.3 Enhanced Water Management Dashboard

SIEMENS will provide all labor, software, database integration, and training required to provide the CLIENT's water utility department with AquaHawk software or equivalent. This online water account dashboard is designed to report water usage on individual accounts, using a web based server that obtains daily consumption data via an export file from the AMI/billing system.

SIEMENS shall also include:

- All required integration and setup of data transfer;
- Initial setup and 1 day training;

CLIENT acknowledges that AquaHawk will host AquaHawk software on a cloud-based server and that this hosting service requires acceptance of the AquaHawk terms and conditions and an annual service fee to be paid to AquaHawk by CLIENT.

Exclusions:

- Any ongoing service fees charged by manufacturer of customer dashboard software
- Any fees associated with adding additional accounts to dashboard software
- Any ongoing or post installation technical support or assistance beyond the initial training sessions for the dashboard software.

1.2.4 WWTP Aeration System Upgrades

SIEMENS will provide all equipment, material, and labor to upgrade the wastewater treatment plant aeration systems as defined below. The upgrades or replacements will encompass the aeration blower, piping, and diffuser systems.

- **Replace Existing Blowers For Aeration Basin**
  - Removal of two existing blowers. Provide as salvage to CLIENT.
  - Install two new Atlas Copco Turbo Blowers.
  - Provide for blower pad modifications and additional discharge piping to accommodate additional pad height. Concrete pad TOC (Top of Outer Casing) elevation to be 53.36 inches. Existing building finished floor elevation is 50.16 inches.
  - Provide elevated platform around new Atlas Copco Turbo Blowers with access to all panel and doors.

- Provide and install discharge piping from blower to proposed air piping air header (including installation of Atlas Copco valves on discharge line, and connection to main air header).
- Install Blower Room Ventilation Fans:
  - Install two ventilation fans (aluminum, beehive ventilation box, 5000 scfm at ¼-inch static pressure) in blower room with integral louvers.
  - Cut out existing concrete masonry unit block in location of fan and install fan and frame.
- Electrical Items of Work:
  - Blower Building – Aeration Blowers No. 1 and 2
    - Demo existing above ground conduit and wire from MECC-1 to existing Blowers 1 and 2 (Closest to Aeration Basins)
    - Demo two (2) existing Blower Size 4 full voltage non-reversing buckets in MECC-1.
    - Demo two (2) existing Blower power factor correction capacitors.
    - Provide and install two (2) 400AF/3P/300AT feeder buckets with thermal magnetic breaker for proposed Aeration Blowers
    - Provide and install new conduit and wire from MECC-1 feeder buckets to proposed Aeration Blower locations.
    - Connect new blowers / local control panels.
    - Connect alarms.
  - Blower Building (Control Room) – Atlas Copco ES Central Controller
    - Modify existing lighting panel circuits to accommodate new panel feeder breakers for new low voltage equipment.
    - Provide and install new 30AT 120V feeder breaker in lighting panel for LV power to Central Controller.
    - Install proposed ES Central Controller in Control Room.
    - Provide and install new conduit and power wire from LVP to ES Central Controller.
    - Provide and install new conduit and signal wire from ES Central Controller to new Aeration Blowers Nos. 1 and 2.
  - Modification of Existing Aeration Blower Controls
    - The ES Central Controller shall provide a lag call output to start an existing multi-stage blower in the event that the Atlas Copco Turbo blower does not have enough capacity to reach the target D.O. setpoint.
    - The controller shall provide a lag call output for each remaining blower and shall call additional lag blowers as needed.
    - Provide and install all necessary wiring, relays, and controls in MECC-1 to connect the start circuit of each existing multi-stage blower to the lag call outputs in the ES Central Controller.

- The existing multi-stage blowers that are selected will then run at full speed when called and the turbo blowers will trim speed to maintain the D.O. setpoint.

- Pre-Aeration Basin – D.O. Controller
  - Install D.O. Controller and one (1) D.O. probe in downstream end of Pre-Aeration Basin.
  - Provide and install new conduit, signal wire, and duct bank (as necessary) from D.O. Controller to proposed ES Central Controller.
  - Provide and install new 20AT 120V feeder breaker in lighting panel for LV power to ALL proposed D.O. Controllers.
  - Provide and install new conduit, power wire, and duct bank (as necessary) from lighting panel LVP to Pre-Aeration D.O. Controller.
- Aeration Basin – D.O. Controller
  - Install D.O. Controller and two (2) D.O. probes in the Aeration Basins.
  - Provide and install new conduit, signal wire, and duct bank (as necessary) from D.O. Controller to proposed ES Central Controller.
  - Provide and install new conduit, power wire, and duct bank (as necessary) from lighting panel LVP to D.O. Controller.
- Blower Building – Vent Fans
  - Modify existing MECC-1 and provide and install two (2) FVNR type starter buckets and starter equipment in MECC-1 for estimated 5 HP motors for two fan units.
  - Starter buckets shall include Green "RUN" light, Elapsed Time Meter, and On/Off Switch.
  - Provide and install new conduit and power wire from MECC-1 to two ventilation fans in Blower Building.
- Aeration Basin – CCB Flowmeter and Actuated Valve
  - Install one thermal mass flow meter and one electric actuated butterfly valve on a 6-inch air header to control and monitor air flow to the non-aeration basins and equipment (CCB, RAS box, and grit chamber).
  - Provide and install conduit, signal wiring, and duct bank from the flowmeter and actuated valve to the Atlas Copco ES Central Controller. The ES Central Controller shall be programmed to allow the user to set a CFM flow target to the non-aeration areas and modulate the valve as needed to reach the target.
  - Provide and install all necessary low voltage breakers in the MECC-1 lighting panel to power the flowmeter and motor operated valve.
  - Provide and install conduit, power wiring, and duct bank to connect the low voltage lighting panel to the flowmeter and motor operated valve.

- Blower Building (Control Room) – Aeration Basin Blower Alarms
  - Provide and install a NEMA 3R Cellular Autodialer capable of interpreting alarms provided by the Blower ES Central Controller. Include all wiring, conduit, breakers, hardware, communications hardware, programming, testing, and startup. The cellular antenna shall be mounted to the exterior of the control room. The autodialer shall have a minimum of 16 discrete input channels available to read alarms provided by the Central Controller. Provide connection and programming for up to 16 alarms through discrete wiring or hi-level communication wiring.
    - Provide for the following alarms to be wired to the autodialer:
      - Blower No. 1 General Alarm
      - Blower No. 2 General Alarm
      - Blower No. 1 Low Air Header Pressure Alarm
      - Blower No. 2 Low Air Header Pressure Alarm
      - Low D.O. Level
- Blower Building – Aeration Blowers No. 1 and 2 Instrumentation
  - The following instrumentation will be shipped loose with the blowers and shall be installed as part of this scope:
    - Blower No. 1 Flowmeter
    - Blower No. 1 Air Header Pressure Switch
    - Blower No. 2 Flowmeter
    - Blower No. 2 Air Header Pressure Switch
  - Provide and install all conduit, fittings, power wiring, and signal wiring to connect each instrument to the Atlas Copco ES Central Controller.

- **Replace underground air piping to Aeration Basin**
  - Demolish existing air header installed inside buried concrete chase from Blower Building to Aeration Basin.
  - Install piping with expansion joints where deemed necessary.
  - Connect existing 4" CCB air line, 6" RAS box air line, and 6" grit removal air line on a single common 6" branch-off from the main air header in the concrete chase. Allow for a portion of the 6" common air line to be installed above ground for the proposed 6" flow control valve and thermal mass flow meter to be installed. Provide new manual butterfly valves on the 4" CCB air line, the 6" RAS box air line, and the 6" grit removal air line.
  - Install 1-inch diameter threaded outlet with threaded plug on air lines to the CCB, RAS box, and grit removal chamber. Install 1-inch diameter outlet with threaded plug on all fine bubble aeration drop legs.
  - Install condensate drains at the end of the aeration pipe run serving each of the two aeration basins and the single pre-aeration basin.
  - Ensure piping material is of high quality and designed to withstand plant conditions for at least 15 years.

- Provide new galvanized steel pipe and necessary galvanized steel supports from blower building to Aeration Basin and from Aeration Basin to Pre-Aeration Basin.
- Cap existing air piping where piping is removed.
- Remove and dispose of demolition spoils.

- **Replace Existing Pre-Aeration Basin Air Diffuser System**
  - Clean, remove, and dispose of up to two (2) feet of accumulated solids and debris. Additional volumes of solids and debris will be removed at the rate of $130 per cubic yard of material.
  - Remove and dispose of all air headers and laterals, valves, air drops.
  - Furnish and install a six inch (6") isolation butterfly valve on two (2) air drop legs. Fittings will be provided where necessary.
  - Install new Sanitaire Silver Series fine bubble diffusers and grids.

- **Replace Existing Aeration Basin Air Diffuser System**
  - Clean, remove, and dispose of up to two (2) feet of accumulated solids and debris. Additional volumes of solids and debris will be removed at the rate of $130 per cubic yard of material.
  - Remove and dispose of all air headers and laterals, valves, air drops.
  - Furnish and install a six-inch (6") isolation butterfly valve on four (4) air drop legs and a four-inch (4") isolation butterfly valve on two (2) drop legs. Fittings will be provided where necessary.
  - Install new Sanitaire Silver Series fine bubble diffusers and grids.

Exclusions:

- Does not include working on equipment while running, including aeration blowers and aeration basins;
- Does not include improvements for the MCC serving the aeration blowers, this MCC is located in the main building.
- Does not include tie in to any existing SCADA system that may be implemented during the SIEMENS construction period.
- SIEMENS will be responsible for the removal and disposal of up to two (2) feet of accumulated solids and debris in the pre-aeration and aeration basins. Any solids and debris needing removal in addition to the above stated volume of two (2) feet multiplied by the area of the basins will be removed and disposed of at the rate of $130 per cubic yard.
- Does not include clearing of material and debris in current blower building. Material owned by CLIENT will need to be removed and enough space cleared for construction before installation of the blowers can begin.

1.2.5 WWTP Digester MECC Replacement

SIEMENS will provide all equipment, material, and labor to upgrade the MECC-4 serving the digester blowers and the belt press building as defined below:

- Demolish the existing MECC-4.

- Provide and install replacement motor control center "MECC-4" in a new outdoor rated, NEMA 4X Stainless Steel drop-over enclosure. MCC is to be installed on an elevated concrete slab/structure a minimum of 18" above the 100 year floodplain (estimated 4 feet above natural ground). MECC-4 shall also provide bucket space for future loads.
- Provide and install a canopy or overhang attached to the existing belt press building that extends out a minimum of four (4) feet in front of the face of MECC-4.
- Provide and install all conduit, wire, gutters, terminal boxes, and hardware to connect all existing pumps, motors, control panels, instrumentation, lighting, and receptacles to MECC-4.
- Splice and reconnect main feeder from MECC-1 to MECC-4 in gutter.
- Provide temporary backup power as needed to operate belt press, digester blowers, and all peripheral equipment fed by MECC-4.

Exclusions:

- Does not include working on equipment while running, including digester blowers, digester basins, and thickener;
- Does not include tie in to any existing SCADA system that may be implemented during the SIEMENS construction period.

1.2.6 WWTP Digester Blower Replacement

SIEMENS will provide all equipment, material, and labor to replace the two (2) existing multi-stage centrifugal blowers serving the digester mixing aeration process as defined below:

- Removal of two (2) existing blowers. Provide to CLIENT as salvage.
- Install two (2) new multi-stage centrifugal blowers.
- Provide for blower pad modifications if needed.
- Provide and install discharge piping from blower to existing main air header (including installation of valves on discharge line, and connection to main air header).
- Electrical Items of Work:
    - Disconnect all conduit, wiring, and instrumentation from existing blowers to be removed.
    - Reconnect all conduit, wiring, and instrumentation to new centrifugal blowers.
    - Install instrumentation furnished including 1 x Motor Current Transducer, 2 x Blower Inboard/Outboard Bearing RTDs, and 2 x Blower Inboard/Outboard Bearing Vibration Sensors for each blower.
    - Provide and install conduit and wiring to all instrumentation.
    - Replace MCC bucket overload devices for new blower FLA.
    - Provide and install conduit and power wiring to connect two (2) blower local control panels. Includes installation of local control panels. Provide and install breakers and circuits as necessary in proposed MECC-4.

Exclusions:

- Does not include working on equipment while running, including digester blowers, digester basins, and thickener;
- Does not include tie in to any existing SCADA system that may be implemented during the SIEMENS construction period.

1.2.7 WWTP Main Lift Station Rehabilitation

Except as otherwise expressly provided herein, SIEMENS will provide all equipment, material, and labor to upgrade and rehabilitate the main lift station located at the northeast corner of the wastewater treatment plant. The upgrades or replacements will encompass the wet/dry pit to wet pit conversion, wet pit wall rehabilitation, existing well pump, existing MECC.

- Furnish, install and operate temporary bypass pumps, plugs, HDPE pipe, and connection to Headworks, to allow onsite lift station to be taken out of service for the period required to complete the modifications described above.
- Demolish 6 existing vertical centrifugal pumps, line shaft, motors, suction and discharge piping and valves, stairs, hatches, wiring and controls. Demolish existing CMU/brick veneer building over wet well / dry pit.
- Repair corroded wet well concrete walls and top slab; provide a SewperCoat protective coating or equivalent.
- Cut two 4 ft. square openings in the existing wet well / dry pit divider wall. Core drill 3-inch diameter holes in divider walls to maintain air flow. All exposed rebar to be coated with SIKA Armatec 110 or equal.
- Cut five openings in the top slab for access hatches of sizes shown in lift station plan sheet. All exposed rebar to be coated with SIKA Armatec 110 or equal.
- Seal concrete joints in existing dry well so it becomes suitable as a long-term water-retaining structure. Apply a SewperCoat protective coating or equivalent on the walls and top slab.
- Furnish and install two submersible jockey pumps (Flygt NP 3153 LT 3~ 413 with 217 mm impeller) and three submersible pumps (Flygt NP 3202 LT 3~ 615 with 342 mm impeller).
- Furnish and install wet well accessories: pump base elbows, guide rails, ductile iron pipe risers, stainless steel supports, lift chains, floats, ultrasonic level transducer, cable holder, and pump hatches with safety grating.
- Furnish and install a 12-inch thick valve slab, pump discharge headers with air and vacuum valves, pressure gauges, air release valves, plug valves, hose station, cushioned swing check valves, concrete thrust blocks and adjustable steel pipe supports.
- Coat all piping in the wet well with a 100% high solids epoxy protective coating. Coat all non-submerged piping with a polyurethane protective coating.
- Relocate two existing air compressor/receivers to new electrical enclosure/building.
- Provide startup and testing for the station.
- Provide and install ductile iron discharge piping from individual pump headers to existing below-grade meter vault.
- Extend 8' wood fence around lift station to existing building.
- Electrical Items of Work:

- Lift Station:
  - Demolish the existing MECC-2, VFDs, controls, control panel, lighting, receptacles, and all miscellaneous conduit, wire, and hardware in the existing lift station building (to be demolished).
  - Provide and install replacement motor control center "MECC-2" in a new outdoor rated, walk-in enclosure or pre-fabricated building with air conditioning to house replacement motor control center with VFDs. Building is to be installed on an elevated concrete slab/structure a minimum of 18" above the 100 year floodplain (estimated 4 feet above natural ground).
  - Provide and install all conduit, wire, terminal boxes, and hardware to connect new lift station pumps and instrumentation. Provide and install seven (7) terminal boxes for field connection to pumps and instrumentation, one (1) for each pump, one (1) for the transducer, and one (1) for the float system.
  - Provide and install all conduit, wire, junction boxes, and hardware to connect relocated air compressors, solenoids, lighting, receptacles, and miscellaneous equipment to MECC-2.
  - Provide and install all conduit, wire, and hardware to connect MECC-2 and all lift station instrumentation to the lift station control panel. Provide space in new MECC-2 for installation of control panel and controls. Control panel, controls, and instrumentation shall also be included with MECC-2. It is acceptable to provide the controls in a separate enclosure. Splice and reconnect main feeder from MECC-1 to MECC-2 in gutter.
  - Provide and install a Cellular Autodialer located in the lift station control panel capable of interpreting alarms provided by the lift station controls. Include all wiring, conduit, breakers, hardware, communications hardware, programming, testing, and startup. The cellular antenna shall be mounted to the exterior of the MECC-2 building. The autodialer shall have a minimum of 16 discrete input channels available to read alarms provided by the lift station controls. Provide connection and programming for up to 16 alarms through discrete wiring or hi-level communication wiring. The alarms shall include the following:
    - Wet Well High Level
    - Lift Pump No. 1 Fail
    - Lift Pump No. 2 Fail
    - Lift Pump No. 3 Fail
    - Lift Pump No. 4 Fail
    - Lift Pump No. 5 Fail
    - Lift Station in Float Backup
    - Lift Station Transducer Failure
  - Provide and install a rotating beacon located on the exterior of the new building. The beacon shall be wired to a "general" alarm output from the lift station control panel. Provide all conduit and wire necessary to connect the beacon to the control panel.
- Headworks:

- Provide and install a NEMA 1 control panel located inside the new building that will control the existing fine screens and grit classifier system. Trace all field wiring from existing control panel and provide matching controls in new control panel for all existing instrumentation, pumps, motors, and field devices. Provide all programming, startup, and training on new control system.
- Provide and install all conduit, wire, gutters, junction boxes, and hardware to connect MECC-2 to the existing grit and fine screen systems.

Exclusions:

- Does not include working on equipment while equipment serving the main lift station pumps are running; including pumps, VFD, and air compressors.
- Does not include tie in to any existing SCADA system that may be implemented during the SIEMENS construction period.
- Any autodialer cellular fees incurred for operation of proposed alarm panel.

1.2.8 WWTP Gaseous Disinfection System Conversion

Except as otherwise expressly provided herein, SIEMENS will provide all equipment, material, and labor for conversion from the current chlorine disinfection system to a bleach disinfection system.

- Demolish existing ton container storage facilities for chlorine and sulfur dioxide.
- Retain existing super-structure and roof canopy.
- Furnish and install two (2) 1,400-gallon double-wall, HDPE chemical storage tanks for sodium hypochlorite and two (2) 400-gallon double-wall HDPE chemical storage tank for sodium bisulfite, provide fill stations for both chemicals with isolation valves, check valves, strainers, and quick-connect hose couplings.
- Extend existing concrete pad and canopy to the west of the chemical building to fit the two (2) sodium hypochlorite storage tanks.
- Demolish existing chlorinators and sulfonators in chemical feed rooms, along with water and chemical solution piping within the rooms.
- Furnish and install two sodium hypochlorite and two sodium bisulfite skid-mounted pump assemblies complete with peristaltic pumps, VFDs, pump controller, suction piping, calibration columns, backpressure valves, pulsation dampeners, pressure gages, pressure switches, diaphragm seals, diaphragm isolation valves, and hydrogen degassing valves and vents.
- Furnish and install 3/8" polytube in Sch 80 PVC piping with FRP supports inside the chemical rooms and from the chemical rooms out to the existing chemical injection locations. Connect to existing chemical diffusers.
- Provide startup and testing for the systems.
- Electrical Items of Work:
    - Demolish all conduit, wire, and hardware to all existing feed equipment and instrumentation to be removed.
    - Provide and install all conduit, wire, receptacles, and hardware to connect all peristaltic pumps, pump controller, alarm equipment, pressure switches, level equipment, and miscellaneous instrumentation.

        - Provide and install a NEMA 4X flow signal enclosure capable of receiving one (1) existing effluent flow signal and splitting the signal for up to four (4) identical flow outputs to be wired to the proposed pumps.
        - Extend the existing effluent flow signal wiring as necessary to the new flow signal enclosure. Provide and install all conduit and signal wiring to connect the flow signal enclosure to the proposed chemical feed pumps. Modify existing low voltage panel to add circuits as needed for the new flow signal enclosure.
    - Modify existing low voltage panel to add circuits as needed for new pump equipment.
    - Provide and install a NEMA 4X alarm panel that has as inputs all available alarms from the peristaltic pumps, pump controller, tank level equipment, leak detection equipment, and pressure switches and combines these alarm inputs to one output for connection to a new alarm rotating beacon.
    - Provide and install rotating alarm beacon on exterior of building and provide conduit and wire to connect alarm beacon to alarm panel.
    - Provide and install a Cellular Autodialer located in the alarm panel capable of interpreting alarms provided by the chemical feed equipment. Include all wiring, conduit, breakers, hardware, communications hardware, programming, testing, and startup. The cellular antenna shall be mounted to the exterior of the chemical building. The autodialer shall have a minimum of 16 discrete input channels available to read alarms provided by the chemical feed equipment. Provide connection and programming for up to 16 alarms through discrete wiring or hi-level communication wiring. The alarms shall include the following:
        - Chemical Pump Failure (All 4 Pumps)
        - Leak Detection (All 4 tanks)
        - Pressure Switch High Level (All 4 Pumps)
        - Tube Leak Detection (All 4 pumps)
    - Pressure switch alarm outputs shall be wired to power feed or start circuit to shut down pump on pressure increase.
    - Provide and install conduit, wire, and breakers in lighting panel for heat trace of sodium bisulfite tanks as required.
    - Install heat tracing and insulation for bisulfite tank and all bisulfite piping.
    - Install level and leak detection control panel rack.
    - Provide and install all conduit, fittings, power wiring, and signal wiring to connect the control panel racks to the pump skid and alarm panel accordingly.

Exclusions:

- Does not include working on equipment while equipment running;
- Any autodialer cellular fees incurred for operation of proposed alarm panel.

1.2.9 Digester / Thickener Rehabilitation

Except as otherwise expressly provided herein, SIEMENS will provide all equipment, material, and labor for the rehabilitation work on the digester and thickener basins at the Bellaire Wastewater Treatment Plant.

- Provide surface prep for existing concrete wall surfaces in three digesters and two gravity thickeners. Provide environmental containment of blast material.
- Furnish and install cementitious mortar to repair concrete if needed.
- Furnish and install a 100% high solids epoxy protective coating on the concrete walls
- Repair and coat, or replace, existing 2 ft square sluice gate isolating Digester 2 from 3.

Exclusions:

- Does not include working on equipment while running, including digesters blower, digester aeration, thickeners;

1.2.10 WWTP Return Activated Sludge (RAS) Pump Replacement

Except as otherwise expressly provided herein, SIEMENS will provide all equipment, material, and labor for the installation of a return activated sludge (RAS) pump to replace one pump the CLIENT had previously demolished and removed.

- Remove one (1) existing RAS pump, line shaft, and motor, if necessary, and other miscellaneous equipment the CLIENT had abandoned in place. SIEMENS to return to CLIENT any material removed as salvage.
- Remove one (2) existing RAS pump, line shaft, and motor. SIEMENS to return to CLIENT any material removed as salvage.
- Furnish and install three (3) FLYGT dry/wet pit submersible RAS pump, or equal, to match existing pump function.
- Furnish and install all necessary piping and fitting modifications as required for new pump.
- Electrical Items of Work:
    - Disconnect all conduit, wiring, and instrumentation from existing pump to be removed.
    - Reconnect all conduit, wiring, and instrumentation to new pump.
    - Furnish and install all other electrical or control modifications required for replacement of pump.

Exclusions:

- Does not include working on equipment while running, including RAS pumps and associated electrical and control equipment;
- Does not include tie in to any existing SCADA system that may be implemented during the SIEMENS construction period.

1.2.11 WWTP Waste Activated Sludge Control Valve and Flow Meter Replacement

Except as otherwise expressly provided herein, SIEMENS will provide all equipment, material, and labor for the replacement of the currently non-functioning waste activated sludge (WAS) control valve and flow meter.

- Demolish one existing WAS magnetic flow meter and two electric actuated plug valves.
- Furnish and install one WAS magnetic flow meter and two electric actuated plug valves.
- Modify existing ductile iron piping as needed.
- Furnish and install protective coating on proposing piping and valves.
- Electrical Items of Work:
    - Furnish and install one programmable logic controller (PLC) based NEMA 4X local control panel to control WAS wasting operation.
    - The control operation of the WAS valve shall be the following:
        - The CLIENT operator shall enter desired total daily flow amount to be wasted as a setpoint. The PLC will close the valves when the total daily amount is reached as read from the flowmeter and will keep them closed until the 24 hour/daily timer is reset. While the total daily flow has not been reached, the PLC shall open and close the valve based on a time interval and duration of multiple daily waste cycles as set by the user on the Human Machine Interface (HMI).
        - An HMI shall be provided for setpoint input by the CLIENT operator and shall also show on the screen the Valve Open/Close status, Valve Alarms, Flow Rate, Total Daily Flow (Reset to Zero every 24 hours), Timer Status, Number of Intervals
        - Provide and install all necessary conduit, power wire, and breakers to power the PLC control panel.
        - Provide and install all necessary conduit, power wire, and signal wire to connect the PLC control panel to each valve and flow meter.

Exclusions:

- Does not include working on equipment while running, including the RAS pump that the WAS control valve is diverting off and associated electrical and control equipment;
- Does not include tie in to any existing SCADA system that may be implemented during the SIEMENS construction period.

1.3 Technical Specifications, Drawings, and Exhibits:

- All electrical work to comply with applicable NEC guidelines;
- All relevant product datasheets, O&M manuals, wiring diagrams, and manufacturer's warranties to be supplied to CLIENT;
- All relevant drawings generated for the WWTP during the design process will be supplied to CLIENT;

1.4 CLIENT's Responsibilities:

- Provide a designated representative to interface with SIEMENS on all issues related to the project;
- Provide for timely review of project schedules and submittals, typically a 5 business day approval turn-around unless otherwise specified;
- Provide access to buildings, with 3 business day advance notice of work schedules, including coordination with building occupants and stakeholders, provide escorts as required in secure areas;
- Provide for timely review and approval of completed work;
- Provide assistance for electrical utility shutdowns of sections of the facilities that may be required. SIEMENS intends to minimize disturbances and will coordinate with site management personnel to implement project with reasonable disturbances.
- Provide remote access to CLIENT's water meter database to allow SIEMENS, and/or its subcontractors, to monitor system functionality and consumption history.
- During implementation of water meters, CLIENT will be required to upload meter data file(s) provided by SIEMENS in a timely fashion, at least once a week.

Article 2: FIM Work Implementation Period

2.1 Commencement of Work: SIEMENS shall commence the Work 60 calendar days from the Notice to Proceed Date, and shall perform the Work diligently and shall complete the Work no later than 450 calendar days from the day of commencement.

2.2 *Milestones*: Specific scheduling milestones and coordination requirements will be defined in the project schedule to be provided at Commencement of Work.

Article 3: Scope of Services-Performance Assurance Services Program

3.1 The Performance Assurance Services Program (PASP) shall be performed during the Performance Guarantee Period unless terminated in accordance with terms and conditions of Article 4 of the Performance Contracting Agreement.

3.2 Siemens will provide, as a part of the Performance Assurance Services Program, the following services and deliverables as described in the Performance Assurance, Exhibit C of this contract but not limited to:

3.2.1 One annual inspection of facilities and infrastructure associated with the scope of work of this contract. An annual inspection report will be included with the Annual Performance Assurance Report.

3.2.2 One Annual Performance Assurance Report for all FIMs contributing to the savings achieved for the applicable Annual Period. Except as otherwise provided, energy savings will be calculated for each month of each Annual Period.

3.3 The Annual Performance Assurance Report will be provided within 90 calendar days of the annual anniversary of the Guarantee Date.

Article 4: Scope of Maintenance Services Technical Support Program

4.1 CLIENT has elected to self-implement maintenance. Therefore, SIEMENS shall not perform any on-going maintenance services, although the Parties may negotiate a separate agreement for such services at a later date. CLIENT agrees that it will maintain the equipment per manufacturer specifications and that it will operate the Equipment in accordance with the Contracted Baseline described in Article 7 of Exhibit C. If CLIENT fails to properly maintain or operate the Equipment, SIEMENS shall have the right to modify the Performance Guarantee pursuant to Article 4 of the Agreement.

By signing below, this Exhibit is attached to and made a part of the Agreement between SIEMENS and the CLIENT.

CLIENT:	City of Bellaire, TX	**SIEMENS:**	Siemens Industry, Inc.
Signature:		Signature:	
Printed Name:	Andrew S. Friedberg	Printed Name:	Peter Kamps
Title:	Mayor	Title:	Vice President Finance & Business Administration
Date:	August 29, 2016	Date:	
Signature:			David R. Mangano
Printed Name:			Sr. Vice President Field Operations
Title:			
Date:			

Approved By Legal

Marc E. Bouchard

Article 1: Payment for Scope of Work

1.1 **Price:** As full consideration of the Work as described in Exhibit A, Article 1: Scope of Work, the CLIENT shall pay to SIEMENS $12,781,805.00 (plus taxes, if applicable).

1.2 CLIENT represents and warrants that it has sufficient funding to pay for all sums set forth in this Exhibit B. CLIENT further represents and warrants that it shall do all acts required of it to ensure funding is timely secured and segregated to ensure timely payment to SIEMENS for its services under this Agreement. CLIENT shall issue a Notice to Proceed to SIEMENS upon receipt of funding. In the event that a notice to proceed is not issued within one hundred eighty (180) days of the execution of this Agreement, Siemens shall be entitled to terminate this Agreement. In the event that Siemens terminates the Agreement as described in this paragraph, CLIENT shall be obligated to reimburse SIEMENS for all for the Work performed through the date of termination.

1.3 **Timely Payments:** The CLIENT agrees to pay SIEMENS monthly pursuant to SIEMENS payment requests. The monthly payments shall be based upon the applicable percentage of work completed through the date indicated on SIEMENS' written payment request. Other than the Mobilization and Audit Payment set forth below, Table B.1 table represents an anticipated schedule of progress payments. CLIENT agrees to pay the Mobilization and Audit payment within 45 days of Notice to Proceed of this Agreement. CLIENT agrees to pay all invoices submitted by SIEMENS per Article 8 of the Agreement.

Table B.1 – FIM Work Payment Schedule Sample

Project Phase	Payments ($)	Payments (%)	Schedule
Audit & Mobilization	$ 511,272.20	4.00%	Month 1
Progress Payment #1	$ 255,636.10	2.00%	Month 2
Progress Payment #2	$ 1,917,270.75	15.00%	Month 3
Progress Payment #3	$ 766,908.30	6.00%	Month 4
Progress Payment #4	$ 1,278,180.50	10.00%	Month 5
Progress Payment #5	$ 383,454.15	3.00%	Month 6
Progress Payment #6	$ 639,090.25	5.00%	Month 7
Progress Payment #7	$ 894,726.35	7.00%	Month 8
Progress Payment #8	$ 1,022,544.40	8.00%	Month 9
Progress Payment #9	$ 1,022,544.40	8.00%	Month 10
Progress Payment #10	$ 1,278,180.50	10.00%	Month 11
Progress Payment #11	$ 894,726.35	7.00%	Month 12
Progress Payment #12	$ 639,090.25	5.00%	Month 13
Progress Payment #13	$ 639,090.25	5.00%	Month 14
Retainage & Final Payment	$ 639,090.25	5.00%	End of Project
PROJECT TOTAL:	$ 12,781,805.00	100%	

Article 1 of Exhibit B is attached to and made a part of the Agreement between SIEMENS and the CLIENT.

CLIENT:	**City of Bellaire, Texas**	**SIEMENS:**	**Siemens Industry, Inc.**
Signature:		Signature:	
Printed Name:	Andrew S. Friedberg	Printed Name:	Peter Kamps
Title:	Mayor	Title:	Vice President
Date:	August 29, 2016	Date:	Finance & Business Administration
		Signature:	
		Printed Name:	David R. Mangano
		Title:	Sr. Vice President
		Date:	Field Operations 9/1/16

Approved By Legal
Marc E. Bouchard

Article 2: Payment for Performance Assurance Services Program (PASP)

2.1 **Price:** As full consideration of the Services as described in Exhibit A, Article 3, the CLIENT shall pay to SIEMENS the amounts identified in Table B.2 plus taxes, if applicable, on the dates identified therein. CLIENT will be billed the annual amount in the first month of the PASP period.

2.2 **Performance Assurance Services Program Term:** The term of the PASP shall commence on the Guarantee Date and shall extend for either: (a) the term of the Performance Guarantee Period where multi-year obligations are allowed; or (b) for twelve (12) month periods corresponding to the term of each Annual Period.

2.3 **Automatic Renewal:** Where the PASP term is limited to an Annual Period, the PASP shall automatically renew for successive Annual Periods beginning on the anniversary date of Guarantee Date. Either party may request to amend the PASP at the end of an Annual Period by giving the other party at least sixty (60) days prior written notice of such amendments and such amendment shall be mutually negotiated by the Parties and effective upon a written amendment signed by both Parties prior to commencement of the next Annual Period. Each automatic renewal shall be and remain subject to the terms and conditions of this Agreement. SIEMENS obligations under the Performance Guarantee are dependent upon and subject to the express condition that the CLIENT maintains the PASP during the entire Performance Guarantee Period.

2.4 **Termination**: See Section 4.7 of the Agreement.

Table B.2 – Performance Assurance Program Payment Schedule

Date	Annual Payments ($)	Notes
Year 1	$47,505	Year 1 Measurement & Verification
Year 2	$48,930	Year 2 Measurement & Verification
Year 3	$50,400	Year 3 Measurement & Verification
Year 4	$51,910	Year 4 Measurement & Verification
Year 5	$53,470	Year 5 Measurement & Verification
Year 6	$59,000	Year 6 Measurement & Verification
Year 7	$60,700	Year 7 Measurement & Verification
Year 8	$62,515	Year 8 Measurement & Verification
Year 9	$64,390	Year 9 Measurement & Verification
Year 10	$72,950	Year 10 Measurement & Verification
Year 11	$75,145	Year 11 Measurement & Verification
Year 12	$77,400	Year 12 Measurement & Verification
Year 13	$79,720	Year 13 Measurement & Verification

Year 14	$82,110	Year 14 Measurement & Verification
Year 15	$84,600	Year 15 Measurement & Verification
Year 16	$93,060	Year 16 Measurement & Verification
Year 17	$95,852	Year 17 Measurement & Verification
Year 18	$100,644	Year 18 Measurement & Verification
Year 19	$105,677	Year 19 Measurement & Verification
Year 20	$116,244	Year 20 Measurement & Verification

Article 2 of Exhibit B is attached to and made a part of the Agreement between SIEMENS and the CLIENT.

CLIENT: City of Bellaire, Texas
Signature:
Printed Name: Andrew S. Friedberg
Title: Mayor
Date: August 29, 2016

SIEMENS: Siemens Industry, Inc.
Signature:
Printed Name: Peter Kamps
Title: Vice President
Date: Finance & Business Administration

Signature:
Printed Name: David R. Mangano
Title: Sr. Vice President
Date: Field Operations

Article 3: Payment for Maintenance Services Program (MSP)

3.1 **Not Applicable:** Per exhibit A, Article 4, a Maintenance Service Program, (MSP) is not included in the scope of this agreement. If the Parties later agree, SIEMENS may perform maintenance services for additional fees on a Time and Materials basis or as established in a separate maintenance agreement.

Article 3 of Exhibit B is attached to and made a part of the Agreement between SIEMENS and the CLIENT.

CLIENT: City of Bellaire, Texas
Signature:
Printed Name: Andrew S. Friedberg
Title: Mayor
Date: August 29, 2016

SIEMENS: Siemens Industry, Inc.
Signature:
Printed Name: Peter Kamps
Title: Vice President
Date: Finance & Business Administration

Signature:
Printed Name: David R. Mangano
Title: Sr. Vice President
Date: Field Operations

Approved By Legal
Marc E. Bouchard

The following Articles and Tables are hereby included and made part of this Exhibit C:

Article 1: Summary of Articles and Total Guaranteed Savings

Article 1	Summary of Articles and Total Guaranteed Savings
Article 2	Measurement and Verification Options
Article 3	Performance Guarantee Period Responsibilities of CLIENT
Article 4	Measurement and Verification Plan
Article 5	Baseline Data
Article 6	Utility Rate Structures and Escalation Rates
Article 7	Contracted Baseline Data
Attachment 1	Water Meter Annual Revenue Calculations
Attachment 2	Water Meter Account List
Attachment 3	Water Meter Baseline Consumption Data
Attachment 4	Water Meter Baseline Test Results
Attachment 5	Water Meter Manufacturer's Warranty

Table 1.1 - Total Guaranteed Savings (Units)

Performance Period	Electric Energy Saved (kWh)	Electric Power Demand Saved (kVA, 12 month sum)[1]	Increased Billable Water and Sewer (hundred gallon)[2]
Construction	0	0	0
Annual Period 1	604,333	0	1,010,474
Annual Period 2	604,333	800	1,058,753
Annual Period 3	604,333	800	1,101,791
Annual Period 4	604,333	800	1,148,032
Annual Period 5	604,333	800	1,194,279
Annual Period 6	604,333	800	1,173,354
Annual Period 7	604,333	800	1,193,488
Annual Period 8	604,333	800	1,213,706
Annual Period 9	604,333	800	1,234,008
Annual Period 10	604,333	800	1,254,395
Annual Period 11	604,333	800	1,274,865
Annual Period 12	604,333	800	1,295,418
Annual Period 13	604,333	800	1,275,926
Annual Period 14	604,333	800	1,295,129
Annual Period 15	604,333	800	1,314,409
Annual Period 16	604,334	800	1,333,766
Annual Period 17	604,334	800	1,353,199
Annual Period 18	604,334	800	1,372,708
Annual Period 19	604,334	800	1,392,292
Annual Period 20	604,334	800	1,411,953
Total	**12,086,680**	**15,200**	**24,901,945**

1. Demand savings are not guaranteed in Period 1 Annual Savings due to the ratchet clause in Centerpoint Electric Rate Structure. If the construction period aligns such that Demand reductions are realized, Siemens will report the actual reductions on the year one PASP report. Demand Savings are included for Periods 2-20.
2. Increased billable water and sewer volumes from annual period 16 onward are stipulated values and verified under M&V Option 'E' during years 16-20.

1.1 Table 1.1 above shows the Annual Total Guaranteed Savings in units for each year of the Performance Guarantee Period. In order to achieve these unit savings, the CLIENT must operate the Facility in accordance with the Contracted Baselines identified in Article 7. 2.

1.2 Client represents and warrants that it is paying Siemens with available capital funds pursuant to Texas Local Government Code 302.004(a-1). Accordingly, Client acknowledges that the costs of the project will not be covered solely out of the savings realized by Client under the Agreement. Client has requested Siemens to install certain measures that are related to, connected with or otherwise ancillary to the FIM's as set forth in Exhibit A. Exhibit A depicts all items to be installed by Siemens.

Table 1.2 – Total Guaranteed Savings and Operational Savings

Performance Period	Energy/Utility Savings ($)	Billable Water/Sewer Increase ($)[2]	Operational Savings ($)
Construction	0	0	0
Annual Period 1[1]	36,720	491,733	126,800
Annual Period 2	42,729	523,007	130,604
Annual Period 3	44,010	552,523	134,522
Annual Period 4	45,331	584,410	138,558
Annual Period 5	46,691	617,133	142,715
Annual Period 6	48,091	615,366	146,996
Annual Period 7	49,534	635,333	151,406
Annual Period 8	51,020	655,806	155,948
Annual Period 9	52,551	676,796	160,626
Annual Period 10	54,127	698,315	165,445
Annual Period 11	55,751	720,375	170,409
Annual Period 12	57,424	742,988	175,521
Annual Period 13	59,146	742,888	180,786
Annual Period 14	60,921	765,412	186,210
Annual Period 15	62,748	788,492	191,796
Annual Period 16	64,631	812,137	197,550
Annual Period 17	66,570	836,363	203,477
Annual Period 18	68,567	861,180	209,581
Annual Period 19	70,624	886,602	215,869
Annual Period 20	72,743	912,641	222,345
Total	**1,109,929**	**14,119,500**	**3,407,163**

1. Demand savings are not guaranteed in Period 1 Annual Savings due to the ratchet clause in Centerpoint Electric Rate Structure. If the construction period aligns such that Demand reductions are realized, Siemens will report the actual reductions on the year one PASP report. Demand Savings are included for Periods 2-20.
2. Increased billable water and sewer revenue increases from annual period 16 onward are stipulated values and verified under M&V Option 'E' during years 16-20.

1.3 Table 1.2 shows the CLIENT'S guaranteed cost Savings for each Annual Period that are extrapolated from the guaranteed energy/utility unit Savings shown in Table 1.1 by multiplying the energy/utility Savings by the Baseline energy/utility rates including the stipulated Escalation Rates found in Article 6.

1.4 SIEMENS cannot and does not predict fluctuations in utility rates or the cost of energy. Therefore, the CLIENT and SIEMENS agree that the energy/utility cost Savings for each

Annual Period will be calculated by multiplying the verified units of energy/utility Savings by the Annual Period's stipulated energy/utility rate and Escalation Rates and not the Annual Period's actual utility rate.

1.5 It is the CLIENT's responsibility to bill and collect for all increased meter accuracies. Should the CLIENT decide to forgive any increased accuracy impact outlined in this contract, it is at their sole discretion and shall not impact the benefit described herein.

1.6 The determination of energy/utility Savings will follow current best practice, as defined in the IPMVP, or the FEMP Guidelines where required, unless otherwise agreed to by the Parties.

1.7 The Performance Guarantee does not operate to guarantee the Savings per-FIM. Rather, the calculation of Savings is based on aggregate performance of all of the FIMs contained in the Project. The projected value of such aggregate performance is contained in Table 1.2 above representing the Total Guaranteed Savings as monetized.

Article 2: Measurement and Verification ("M&V") Options

2.1 There are five options to measure and verify energy/utility Savings: Option A - Retrofit Isolation: Key Parameter Measurement; Option B - Retrofit Isolation: All Parameter Measurement; Option C - Whole Facility; and, Option D - Calibrated Simulation. Options A through and including D are part of the IPMVP. Option E-Stipulated is based on industry accepted engineering standards and is the Option used for purposes of calculating Operational Savings.

Option A - Retrofit Isolation, Key Parameter Measurement: Savings are determined by field measurement of the key performance parameter(s) which define the energy use of the FIM's affected system(s) and/or the success of the Project. Measurement frequency ranges from short-term to continuous, depending on the expected variations in the measured parameter and the length of the reporting period. Parameters not selected for field measurement are estimated. Estimates can be based on historical data, manufacturer's specifications, or engineering judgment. Documentation of the source or justification of the estimated parameter is required. The plausible savings error arising from estimation rather than measurement is evaluated. If applicable, the predetermined schedule for data collection, evaluation, and reporting is defined in Exhibit A, Article 3-Performance Assurance Services Program.

Option B - Retrofit Isolation, All Parameter Measurement: Savings are determined by field measurement of the energy use of the FIM-affected system. Measurement frequency ranges from short-term to continuous, depending on the expected variations in the savings and the length of the reporting period. If applicable, the predetermined schedule for data collection, evaluation, and reporting is defined in Exhibit A, Article 3-Performance Assurance Services Program.

Option C - Whole Facility: Savings are determined by measuring energy use at the whole Facility or sub-Facility level. Continuous measurements of the entire Facility's energy use are taken throughout the reporting period. If applicable, the predetermined schedule for data collection, evaluation, and reporting is defined in Exhibit A, Article 3-Performance Assurance Services Program.

Option D - Calibrated Simulation: Savings are determined through simulation of the energy use of the whole Facility, or of a sub-Facility. Simulation routines are demonstrated to adequately model actual energy performance measured in the Facility. This Option usually requires considerable skill in calibrated simulation. If applicable, the predetermined schedule for data collection, evaluation, and reporting is defined in Exhibit A, Article 3-Performance Assurance Services Program.

Option E - Stipulated: This Option is the method of measurement and verification applicable to FIMS consisting either of Operational Savings or where the end use capacity or operational efficiency; demand, energy consumption or power level; or manufacturer's measurements, industry standard efficiencies or operating hours are known in advance, and used in a calculation or analysis method that will stipulate the outcome. Both CLIENT and SIEMENS agree to the stipulated inputs and outcome(s) of the analysis methodology. Based on the established analytical methodology the Savings stipulated will be achieved upon completion of the FIM and

no further measurements or calculations will be performed during the Performance Guarantee Period. If applicable, the methodology and calculations to establish Savings value will be defined in Section 4.6 of this Exhibit C.

2.2 Table 2.1 below summarizes the first Annual Period's Guaranteed Savings (See Article 1, Tables 1.1 and 1.2) utilizing the applicable Measurement and Verification Options as applied to the referenced FIMs valued pursuant to the agreed upon amounts identified in Article 6 hereof.

Table 2.1 – Savings for First Annual Period by M&V Option

FIM	Energy/Utility Savings $ M&V Options						Operational Savings $	Total Savings $
	A Retrofit Isolation: Key Parameter Measurement	B Retrofit Isolation: All Parameter Measurement	C Whole Facility	D Calibrated Simulation	E Stipulated	Total Energy/Utility Savings	E Stipulated	
Water Meter / AMI	$491,733	$0	$0	$0	$0	$491,733	$76,800	**$568,533**
WWTP Aeration System Improvements	$35,459	$0	$0	$0	$0	$35,459	$15,000	**$50,459**
WWTP Digester Upgrades	$1,261	$0	$0	$0	$0	$1,261	$12,500	**$13,761**
WWTP Main Lift Station Rehabilitation	$0	$0	$0	$0	$0	$0	$10,000	**$10,000**
WWTP RAS Pump Replacement & WAS Controls	$0	$0	$0	$0	$0	$0	$12,500	**$12,500**
TOTAL	**$528,453**	**$0**	**$0**	**$0**	**$0**	**$528,453**	**$126,800**	**$655,253**

2.3 Table 2.2 identifies the source of Operational Savings defined and quantified by the Parties. The Parties affirm that such amounts are Stipulated Savings for purposes of calculating Annual Realized Savings and acknowledge that the Guaranteed Savings identified herein have been based on CLIENT'S affirmation. **OPERATIONAL SAVINGS SHALL NOT BE MEASURED OR MONITORED DURING THE PERFORMANCE GUARANTEE PERIOD.** SIEMENS has explained to the CLIENT and the CLIENT has satisfied itself as to how Operational Savings are incorporated into the Annual Realized Savings.

Table 2.2 - Source of Operational Savings

FIM	Description	First Year Savings	# of Annual Periods Savings Are Applied	Annual Period Savings Begin
Water Meter / AMI	Cancellation of 3rd party Meter Reading Contract = Cost Reduction	$76,800	20	1

FIM	Description	First Year Savings	# of Annual Periods Savings Are Applied	Annual Period Savings Begin
WWTP Aeration System Improvements	Reduction in maintenance labor and replacement materials due to aeration system rehabilitation and new blowers.	$15,000	20	1
WWTP Digester Upgrades	Reduction in maintenance labor and replacement materials due to digester upgrades, new blowers, and new MECC equipment. .	$12,500	20	1
WWTP Main Lift Station Rehabilitation	Reduction in maintenance labor and replacement materials due to pump & motor upgrades, new piping, new controls, and new MECC equipment.	$10,000	20	1
WWTP RAS Pump Replacements & WAS Controls	Reduction in maintenance labor and replacement materials due to pump & motor upgrades, new controls and new valves.	$12,500	20	1
Total		**$126,800**		

2.4 The Escalation Rate applicable to the Operational Savings is 3.0%.

Article 3: Performance Guarantee Period Responsibilities of the CLIENT

In addition to the CLIENT'S responsibilities under Article 6 of the Agreement, this Article details the responsibilities of the CLIENT in connection with the management and administration of the Performance Guarantee.

3.1 The CLIENT will provide a representative at each Facility to coordinate work and provide the required data described below.

3.2 The CLIENT will provide SIEMENS with accurate Facility operating information (as defined below and Article 7 of this Exhibit C) during each Annual Period, as soon as such information becomes available to the CLIENT.

(a) Any Material Change to energy consuming or regulating equipment, operating schedules, business/services conducted occupancy, or hours of operation.
(b) Any malfunctions, failures and related changes in energy consuming or regulating equipment. Any damage to, destruction of, or condemnation of the Work.
(c) Executed preventive maintenance and repair records.
(d) Energy usage and cost.
(e) Annually provide copies of all water, sewer, and electric rate schedules used for billing during the previous 12 month period if changed from the previous year.
(f) Annually provide monthly number of water meter accounts.

In order to verify meter quantities and to verify system integrity for measurement and verification purposes, after substantial completion CLIENT shall allow SIEMENS reasonable access to its meter database as long as a performance assurance agreement exists between the CLIENT and SIEMENS. If the performance assurance agreement is cancelled by the CLIENT, the CLIENT reserves the right to rescind SIEMENS access to its water meter database. No changes shall be made to the database by SIEMENS.

Additionally, CLIENT must annually provide Siemens with a list of all water accounts in the system. The list must be in electronic format and include the following (Privacy limitations apply within local, state and federal and the information shall only be used for the sole purpose of this agreement):

- Monthly Metering Dates (specific 12 month period requested by Siemens)
- Monthly Billing Dates (specific 12 month period requested by Siemens)
- Monthly Billed Water (specific 12 month period requested by Siemens)
- Meter Serial Number stamped on "Brass Body"
- Meter Installation Date
- Meter Size (3/4, 1", 2" etc.)
- Last Meter Reading
- Last Meter Read Date
- Meter Read Units (kgal, hgal, gallons etc)
- Multiplier on Readings (x10, x100, x1000, etc.)
- Meter Manufacturer Brand
- Meter Type (PD / Turbine /Compound)
- Transceiver Number
- Account Number

- Name of Account Holder
- Account Service Address
- Account Type (irrigation etc.)
- Account Type (Residential, Commercial etc.)
- Account Status (Active / Inactive etc.)
- Sewer Charges Apply (Y/N)
- Water Rate Code
- Sewer Rate Code
- Billed Dollar Amount for Water (specific 12 month period requested by Siemens)
- Billed Dollar Amount for Sewer (specific 12 month period requested by Siemens)
- Billed Consumption Amount for Water (specific 12 month period requested by Siemens)
- Billed Consumption Amount for Sewer (specific 12 month period requested by Siemens)

3.3 The manufacturer's warranties are passed on to the CLIENT. See Attachment 5- Water Meter Manufacturer's Warranty, for the manufacturer's water meter warranty.

3.4 CLIENT understands that maintenance of the water meters is crucial to maintaining system performance and shall be responsible for water meters which exceed the warranty limits shown in Attachment 5. Replacement, repair, testing and return to service or continuation of use of water meters are potential valid approaches; however, SIEMENS will remove these meters from the potential test list.

3.5 A baseline adjustment will be made to the Siemens guarantee if it is found that installed equipment are not properly maintained per manufacturer's requirements as defined in the manufactures operations and maintenance manuals.

3.6 CLIENT shall be responsible for maintaining the water meter database to include but not limited to meter replacements, meter repairs, meter disconnects, new meter installs, and all associated changes in regards to the water meter infrastructure.

3.7 CLIENT will maintain water quality levels on an annual basis equal to or greater than standards outlined by Texas Commission on Environmental Quality and provide SIEMENS a copy of annual water ratings.

3.8 If applicable, the CLIENT will provide SIEMENS with copies of utility bills within thirty (30) days of receipt by the CLIENT or provide access to utility vendor information to allow SIEMENS to include a utility bill analysis in the Annual Performance Assurance Report. The utility bill analysis does not take the place of the Measurement and Verification Plan identified in Article 4 of this Exhibit C and is not used to measure the Project's performance.

3.9 CLIENT will annually facilitate and coordinate utility meter testing including providing a listing of all meters installed in the system, providing access, notification and scheduling of meter replacements as deemed necessary by the CLIENT.

Article 4: Measurement and Verification ("M&V") Plan

The following information is applicable to this Agreement:
Article 4.1 General Overview
Article 4.2 Option A - Retrofit Isolation: Key Parameter Measurement

4.1 **General Overview –**

The purpose of the M&V Plan is to identify the methods, measurements, procedures and tools that will be used to verify the Savings for each FIM which has energy/utility Savings. Savings are determined by comparing prior usage, consumption accuracy or efficiencies (defined as the "Baseline") against the post-FIM implementation usage, consumption, accuracy or efficiencies. The Baseline usage, consumption, accuracy or efficiencies are described in this Exhibit C, Article 5. The post-FIM implementation usage, consumption, accuracy or efficiencies is defined as the Contracted Baseline and are described in this Exhibit C, Article 7.

4.2 **Option A - Retrofit Isolation: Key Parameter Measurement**

4.2.1 Water Meter Replacement

Description

The underlying premise of the Performance Guarantee and the M&V process is that SIEMENS expects a new, positive displacement, residential water meter to mechanically wear in response to two primary factors: the amount of cumulative water and age. The meters with greater amounts of cumulative water measured at any given time are likely to be less accurate than meters with lower accumulated reading meters due to increased wear accompanying the increased amount of measured water. Secondly, age can be a contributing factor in meter accuracy. In the M&V phase, the bulk of the meters will be the same age. Thus targeting high cumulative flow meters each year as the sampling approach for the total population of meters provides at least three levels of benefit: first, the meters with the highest cumulative flow are likely to be the meters closest to falling out of warranty so these are the best candidates for replacement; second, the meters with high cumulative flow are expected to be the lowest accuracy meters so if they pass the guarantee threshold, there is little doubt that the overall system meets the guarantee; and thirdly, replacement of the lowest accuracy meters with new calibrated meters provides an improvement to the overall system accuracy. This methodology is further discussed in the Calculations section below.

Apparent water losses are non-physical losses that occur in utility operations due to meter inaccuracies and systematic data handling errors in billing systems; thus minimizing this apparent water loss yields an increase in billable water. External influences may affect the predicted increase in billable water and the associated revenue. These influences may come from reductions in water and sewer rates or reductions in overall consumption relative to the Baseline Period. Mandatory water use restrictions, drought conditions, and change of customer or business type are other factors beyond SIEMENS control that may affect the realized increase in billable water.

Variables such as decreases in water rates, reduction in overall customer consumption, or weather conditions may affect the amount of increased billable water and associated revenue through no fault of SIEMENS or the Project, thus **SIEMENS GUARANTEES THE PERFORMANCE OF SIEMENS-INSTALLED WATER METER ACCURACIES PRESENTED IN ARTICLES 5 AND 7.**

Calculations

Accuracy testing will be performed annually for the length of the PASP term on a target sampling of meters to provide assurance that the overall meter system is maintaining the desired level of accuracy. The meter information will be tested to American Water Works Association (AWWA) standards and the sampling approach provides a high confidence level that the system is maintaining the desired accuracies.

SIEMENS will remove and replace a sample of meters from each of the following groups for accuracy testing. This sample of meters is selected based upon the group of meter sizes and types listed below:

- 3/4" positive displacement meters;
- 1" positive displacement meters;
- 1.5" positive displacement meters;
- 2" positive displacement meters;

Meters to be tested will be determined by registered volumetric readings. For the first five years, meters with registered volume flow closest to, but less than, the manufacturer's warranty new meter volume flow limit, will be tested. For the following ten years a random sampling will be conducted to determine the meters to be tested. Given this selection process, the resultant accuracies are theoretically the worst amongst the population of meters while the full warranty is in effect and representative of the system thereafter. Therefore, a regression will be created to extrapolate the meter accuracy for each individual meter in the associated usage group population.

For each group of meters tested, a best fit linear regression equation for accuracy will be calculated based upon the cumulative flow through each meter. A y-intercept point of the regression line will be defined as a new meter with an accuracy of 100% and a flow of zero (0) gallons. That is to say, a water meter is 100% accurate until the commencement of flow. The straight-line regression is used to interpolate the accuracy of each individual meter within the usage group based upon the cumulative flow through the meter. The arithmetic average of the entire testable meter population will define the annual post-installation accuracy.

The accuracy tests are to be based on AWWA standards for testing residential water meters per AWWA Manual M6 fifth edition. The formulation for that testing is as follows:

For a true test of a water meter at all flow rates, AWWA standards specify first testing low, medium, and high flow rates and then calculating the aggregate meter efficiency by weighted formula. For PD meters, the three test points (High, Med, and Low flow) are weighted 15%, 70%, and 15% respectively. The formula for meter accuracy is as follows:

(15% x Measured Accuracy @ High flow)
+ (70% x Measured Accuracy @ Medium flow)
+ (15% x Measured Accuracy @ Low flow)
Average Weighted Accuracy of the Meter*

(*reference: AWWA Meter Manual M6, Fifth Edition; pg 54, "Meter Testing")

The positive displacement (PD) meters will be bench tested in a laboratory which requires they be pulled and replaced with new meters each time tested. All tested meters that pass the accuracy limits for warranty purposes will be returned to the CLIENT for reuse. For meters that are outside the acceptable meter performance parameters as determined by the meter manufacturer warranty, SIEMENS will return the meters for repair or replacement under warranty and ultimately return to the CLIENT's inventory.

The quantity of meters to be tested will be selected based upon a confidence and precision level of 80% and 20% respectively. The sampling guidelines of Table 4.1 will be used to select the appropriate number of meters to be tested.

Table 4.1- Sampling Guidelines

Confidence	80%
Precision	20%
Population	**Number of Samples**
1	1
2	2
3	3
4	3
5-6	4
7-9	5
10-13	6
14-19	7
20-29	8
30-49	9
50-110	10
>110	11

The calculation of total additional water billed resulting from the meter retrofit project will be based on the ratio of the tested accuracy of the new meters and the average accuracy of the old meter population less 1. The accuracy ratio less 100% is multiplied by the Baseline annual cumulative water registered for the system or meter size grouping (Table 4.2), as applicable. The result is the amount of increased billable water for the system or that meter group. This process is repeated for each meter group in the baseline listing, if applicable. The sum of these amounts of increased billable water is the total amount of increased billable water for guarantee. This calculated amount of increased billable water is compared to the amount of increased billable water guaranteed. If the calculated amount is higher than the guaranteed accuracy, then the Performance Guarantee is deemed achieved for that Annual Period.

Baseline consumption will be established based on the most recent available consumption data, from Feb 2015 – Jan 2016. This baseline consumption is used as an assumed flow condition, since total quantity of flow is beyond SIEMENS control. SIEMENS will guarantee meter accuracy, and then apply the measured accuracy to the baseline data to determine if the guarantee has been met, and the extent of shortfall, if any.

Both water and sewage revenue associated with the increased billed water calculated will be included in the revenue reconciliation and are considered part of the Performance Guarantee. This approach ensures the CLIENT that the projected performance will be maintained throughout the Performance Guarantee Period. From a calculation perspective, the estimated billable water increase and associated value is found from:

$$MeteredWaterIncrease = \sum_{i=1}^{n}\left(\frac{\eta_{post,i}}{\eta_{base,i}} - 100\%\right) \times Water_{base-billed,i}$$

$$MeteredWaterIncrease\$ = \sum_{i=1}^{n}\left[MeteredWaterIncrease_i \times \left(\$Water_i + \$Sewer_i\right)\right]$$

Where:
$\eta_{post,i}$ = arithmetic average tested meter accuracy for group i
$\eta_{base,i}$ = arithmetic average baseline meter accuracy for group I from Table 4.2
$Water_{base-billed,I}$ = the baseline annual cumulative water registered for group i, kgal
MeteredWaterIncrease = total increased billable water, kgal
$Water$i = Cost per kGal of water sold to customers in group i from Article 6
$Sewer$i = Cost per kGal of sewerage sold to customers in group i from Article 6
MeteredWaterIncrease$ = estimated total increased billable water revenue

If the average of the meters tested within any Annual Period is above the guaranteed accuracy listed in Table 7.1 – Water Meter Accuracy, the meter accuracy will be deemed acceptable. In the event that the average tested meter accuracy is below the guaranteed accuracy, SIEMENS will perform the calculation procedure identified in this Section 4.2.1 to identify the average system or subsystem accuracy. If the weighted average accuracy within any Annual Period is above the guaranteed accuracy listed in Table 7.1 – Water Meter Accuracy, the meter accuracy will be deemed acceptable. In the event that the average system accuracy is below the guaranteed accuracy, SIEMENS will conduct a review of the test data. Any test meter that tests below the manufacturer's accuracy guarantee will be repaired or replaced through the manufacturer's warranty process. Additional rounds of testing at SIEMENS' expense may be conducted to determine if the increased precision and accuracy of the sample affects the resultant system accuracy.

If the additional testing is performed and SIEMENS determines that the results do not prove to be equal or greater than the guaranteed accuracy, SIEMENS may choose one of two courses of action:

1. Perform a meter replacement program on the population of meters that are not meeting the guaranteed accuracy, or;

2. Discontinue the testing and accept the financial responsibility as calculated in the Annual Performance Assurance Report. The revenue calculation will be based on the difference between the guaranteed accuracy as defined in Table 7.1 – Water Meter Accuracy and the average accuracy for that Annual Period as further defined in this Section 4.2.1. The revenue calculation will be based on the dollar rate schedule contained in the Baseline data listed below in Table 6.1.3 – Water/Sewer rate structures.

Population, installed meters and the interaction of the two are the key indicators that the capability of the water system to sell water is maintained.

Population: 17,849*
*As of 2013, data provided by United States Census Bureau

If the population increases, it is reasonable to assume that the water consumption may increase. Alternately, if the population decreases, it is reasonable to assume the district water consumption may decrease through no fault of SIEMENS.

Installed meters: 7,684*
*Refer to Exhibit A for Quantities by Size

If the number of installed meters increases, it is reasonable to assume that the water consumption may increase. Alternately, if the meter population decreases, it is reasonable to assume the district water consumption may decrease at no fault of SIEMENS.

The amount of annual rainfall can affect the overall consumption by the residents, by changing the amount of irrigation required to keep their lawns healthy. For the Baseline Period the amount of precipitation was:

Baseline (Feb 2015 to Jan 2016) Actual Precipitation = 69.02 inches for Houston, TX.
*Source: NOAA.gov for Houston, TX,

The 30 year average annual rainfall for CLIENT'S location is approximately 49.77 inches, based on data provided by the National Oceanic and Atmospheric Administration (NOAA). If the rainfall increases, there may be less water use for irrigation; conversely if it is a particularly dry year, there may be an increase in irrigation. As a result of any water restrictions imposed by the CLIENT or its water authority, there may be less water use for irrigation, even though the lack of rain and higher temperatures may trend otherwise.

The population and the number of installed meters are key indicators of the capability of the system to provide water. However, if one is reduced and the other increases, a method to evaluate whether the system's capability has increased or decreased may be required. SIEMENS will use Table 4.2 to evaluate whether the system capacity has effectively increased or decreased.

The basis of the calculation is that meter size is an indication of cross sectional flow area. If the flow area is greater, then it is reasonable to assume that more flow can be provided than through smaller meters.

The potential for sufficient increased revenues for the CLIENT from water and sewer charges will be confirmed to meet or exceed the Baseline revenues by verifying that the meter size calculation as presented in Table 4.2 for any Annual Period is greater than or equal to the Baseline Period. If any of these factors are not maintained, the actual volume of the water sold cannot be tied to accuracy improvements and any comparison to actual sold water is not valid.

Table 4.2 - Evaluation of Change in System Capacity

Size	Base Year Number of Meters	Base Year Calculation	Completed Calculation	Post Installation Year Number of Meters	Post Year Calculation	Post Calculation
0.625	2673	0.625 x 0.625 x 2673 =	1044.141	AAA	0.625 x 0.625 x AAA =	0.390625 x AAA
0.75	2727	0.75 x 0.75 x 2727 =	1533.938	BBB	0.75 x 0.75 x BBB =	0.562 x BBB
1	2125	1 x 1 x2125 =	2125	CCC	1 x 1 x CCC =	1 x CCC
1.5	45	1.5 x 1.5 x 45 =	101.25	DDD	1.5 x 1.5 x DDD =	2.25 x DDD
2	84	2 x 2 x 84 =	336	EEE	2 x 2 x EEE =	4 x EEE
TOTALS	7654		5140.328125	SUM(AAA:EEE)		SUM
IF SUM > 5140.328125 then the system capacity is assumed greater or equal to the base year.						

*The sum of meters may not match the actual scope of work, this is because the quantity provided in the table above are the basis of savings calculations. Actual quantity of meters to be replaced/retrofitted is greater than the Base Year Number of meters.

4.2.1.1 Parameters to be maintained during the Performance Guarantee Period are:

(a) Water quality at or above average quality over the most recent 12 month period;
(b) Source of water supply at or above average quality water over the most recent 12 month period from previous source of water supply used;
(c) Water distribution integrity at or above Baseline maintenance levels; and,
(d) Meter/AMI system compatibility with the new system.

4.2.1.2 The meter performance Baseline used for ongoing comparison of future meter test results is as follows:

(a) Baseline Period (full 12 months) = Feb 2015 to Jan 2016

(b) Specific meter accounts included in the baseline are attached in Attachment 2 - Water Meter Account List.
(c) The baseline meter testing data are included as Attachment 4- Water Meter Baseline Test Results.
(d) Details of water consumed for a consecutive 12 month period of each tested meter account, and a grand total of water consumed by these accounts is included is detailed in Article 5. Baseline account meters are 5/8", ¾", 1", 1.5", and 2" in size. These Baseline accounts remain fixed and are the basis for comparison throughout the Performance Guarantee Period. After implementation of the project is completed and the sizes for each meter are verified, the baseline and projected consumption increases will be reconciled.
(e) The water district's water and sewer billing rate schedules in force at the beginning of installation are used for revenue calculations and are documented in Article 6. This will be the basis used for any financial calculations henceforth, not a water billing rate schedule from any other year.
(f) Total population (people) in the water service area at the beginning of this guarantee period was 17,849 based on estimates for 2013 based on the United States Census Bureau.

4.2.1.3 The Baseline Period is chosen using the most recent 12 months of continuous data available for each account through the existing utility billing system at the start of the detailed audit. The baseline period use for establishing baseline consumption is from February 2015 to January 2016.

4.2.1.4 Baseline number of meters and sizes is documented as part of the Baseline. This is to assure that variances in installed meter counts and associated meter sizes are not inconsistent with the Baseline. SIEMENS does not assume responsibility for loss of water consumption within the water district due to declines in installed capability to supply water.

4.2.1.5 Baseline period population (people) is documented as part of the Baseline. This is to assure that variances in population increases or declines are not considered in the Baseline. SIEMENS does not assume responsibility for loss of water consumption within the water district due to population declines.

4.2.1.6 Meter testing was performed on a representative sampling of meters to provide the pre-measurement system average level of accuracy for all meters. The meters were tested to AWWA standards and the sampling approach provides a high confidence level that the meters are indeed inefficient with comparison to new meter accuracies.

The CLIENT provided a complete account download of historical data for each metered account including monthly consumption, meter size, meter installation data, meter serial number, billed charges, account number, account ID, etc.

Based on AWWA guidelines for meter sampling and testing, a random sample of the meters were selected, removed from service, delivered to a third-party testing facility with the results presented in Attachment 4 - Water Meter Baseline Test Results. The

accuracy tests are to be based on AWWA standards for testing residential water meters per AWWA Manual M6. For a true test of a water meter at all flow rates, AWWA standards recommend first testing low, medium, and high flow rates and then calculating the aggregate meter Accuracy by weighted formula. The three test points (High, Med, and Low flow) are weighted 15%, 70%, and 15% for PD meters. The formula for PD meter accuracy is as follow:

(15% x Measured Accuracy @ High flow)
+ (70% x Measured Accuracy @ Medium flow)
+ (15% x Measured Accuracy @ Low flow)
Average Weighted Accuracy of the Meter*

(*reference: AWWA Meter Manual M6, Fifth Edition; pg 54, "Meter Testing")

4.2.1.7 New meter accuracy is based upon the manufacturer warranty. For positive displacement (PD) meters of 1" and smaller, the meter accuracy is guaranteed for the first five (5) Annual Periods. After Annual Period 5, it is assumed that the meter accuracy will decline at a fixed percentage for the remainder of its service life to approximate the ongoing loss of accuracy of the meter as it ages. For 1 ½" and 2" meters, the meter accuracy is guarantee for the first two (2) Annual Periods. After Annual Period 2, it is assumed that the meter accuracy will decline at a fixed percentage for the remainder of its service life to approximate the ongoing loss of accuracy of the meter as it ages. Articles 5 and 7 show the estimated accuracies of the meters throughout Performance Guarantee Period.

4.2.2 Blower and Aeration Efficiency Improvements

Description

The energy savings generated by this FIM are realized by displacing the use of two (2) 100 hp multi-stage centrifugal blowers with two (2) high efficiency magnetic bearing turbo blowers with integrated motors. One new blower will be sufficient to fulfill the aeration requirements of the system for the majority of the year, while the other will act as a secondary for instances where extra aeration is required. The coarse bubble diffusers in the pre-aeration basin will be replaced with fine bubble diffusers while the existing fine bubble diffusers in the aeration basin will be removed and replaced with brand new equipment. Dissolved oxygen level will be used to control the volume of air produced by the aeration blowers. In order to verify the energy savings, the pre-retrofit kW will be compared to the post-retrofit kW. The kWh savings will be calculated from the kW measurements as well as operating hours. The savings will be tabulated on a monthly basis and reported annually.

Measurement or Reference Tables

Pre-Retrofit Measurements

1. Aeration blower kW measurements (one out of four blowers was in inoperable condition during period of measurement):
    - Average kW for measured period

- Blower 3: 50.15 kW
- Blower 2/4: 71.55 kW, blower 2 and 4 alternated in operation during the measurement period and never operated at the same time.

Post-Retrofit Measurements

1. Aeration blower kW measured over the post-retrofit period
2. Automatic control override status
3. Post-retrofit annual hours of operation

Stipulated

1. Pre-retrofit annual hours of operation = 8760 hours
2. Maximum dissolved oxygen level setpoint = 2.0 mg/l
3. Estimated theoretical blower turndown at design point = 66.3%

Calculations

$$kW_{saved} = \left[\left(\frac{\sum_{i=1}^{n-pre} kW_{pre}}{n-pre}\right) - \left(\frac{\sum_{i=1}^{n-post} kW_{post}}{n-post}\right)\right]$$

$$kWh_{saved} = kW_{saved} \times [\text{hours of operation}]$$

$$Utility\ Cost_{saved} = \left(kW_{Saved} \times 12 \times \left({}^{\$}/_{kW}\right)_{contract}\right) + \left(kWh_{saved} \times \left({}^{\$}/_{kWh}\right)_{contract}\right)$$

Where,
n-pre = number of periods in baseline year (366)
n-post = number of aeration blower kW measurements (from cellular logger)
kW_{pre} = pre-retrofit aeration blower measured kW draw
kW_{post} = post-retrofit aeration blower measured kW draw
kW_{saved} = total demand savings
kWh_{pre} = sum of pre-retrofit blower energy consumption
kWh_{post} = sum of post-retrofit blower energy consumption
kWh_{saved} = total consumption energy savings
Utility $Cost_{saved}$ = calculated utility savings for this FIM
$\$/kW_{contract}$ = kW unit cost from contract
$\$/kWh_{contract}$ = kWh unit cost from contract

Responsibility for SIEMENS and CLIENT:
The CLIENT will notify SIEMENS of any problems with the equipment installed by SIEMENS and provide the necessary access to the affected equipment and systems. SIEMENS shall then determine the best course of action to ensure correct operation and to maintain the Performance Guarantee. Unintended changes in operation of systems associated with the FIMs by the CLIENT may require Baseline adjustments.

Baseline Adjustments:

Changes in equipment operation due to fluctuating weather conditions, extended or contracted operating schedules, population changes, or changes in functionality; may change power and energy consumption and require adjustments to the pre-retrofit Baseline models. The Annual Performance Assurance Report will document changes in conditions that may affect Savings persistence.

Specifications on Measurement Tools:

- Cellular Power Logger

4.2.3 WWTP Digester Blower Replacement

Description:
Replacement of the two (2) old 100 hp digester blowers with two (2) new 125 hp digester blowers with the same duty conditions. Verification of the electric savings shall be based on the blower's estimated pre-retrofit motor efficiency estimate, the post-retrofit motor efficiency as stated by the equipment manufacturer, the estimated percent loading on the motor equipment, and the annual operating hours as measured in the baseline condition.

Measurement or Reference Tables:

Pre-retrofit measurements:

- Digester blower kW measurements

Post-retrofit measurements:

- Digester blower kW measurements
- Post-retrofit annual operating hours

Stipulated

- Motor efficiency of existing blower = 90% efficient
- Motor efficiency of new blower = 95% (manufacturer datasheet)
- Pre-retrofit annual operating hours of each unit = 8760 hours

Calculations:
The following calculations will be performed to determine the annual demand and electrical energy reduction. Pre-retrofit standard operating procedure is to have only one blower in operation at a time and the post-retrofit operating procedure is assumed to be the same.

Formulas for Demand Savings (kW) Savings:

kW_{pre} = *average of measured kW over the pre-retrofit measurement period*
kW_{post} = *average of measured kW over the post-retrofit measurement period*
$kW_{saved} = kW_{pre} - kW_{post}$

Formulas for Electrical (kWh) Savings:

$kWh_{pre} = kW_{pre} * Pre\text{-}retrofit\ Operating\ Hours$
$kWh_{pre} = kW_{post} * Post\text{-}retrofit\ Operating\ Hours$
$kWh_{saved} = kWh_{pre} - kWh_{post}$

Formulas for Utility Cost ($) Savings:

$$Total\ Utility\ \$\ Savings = [(kWh)_{saved} * (\$/kWh)_{contract}] + [(kW)_{saved} * (\$/kW)_{contract} * 12\ (months\ per\ year\ that\ kW\ is\ billed)]$$

Where:

- kW_{Pre} = Pre-retrofit motor power demand
- kW_{Post} = Post-retrofit motor power demand
- kW_{saved} = Resulting electrical demand savings
- Operating Hours = stipulated operating hours
- kWh_{Pre} = Pre-retrofit motor electrical consumption
- kWh_{Post} = Post-retrofit motor electrical consumption
- kWh_{saved} = Resulting electrical consumption savings
- $\$/kWh_{contract}$ = Cost of electrical energy consumption based on relevant rate tables in Article and stipulated escalations
- $\$/kW_{contract}$ = Cost of electrical power demand based on the relevant rate tables in Article 6 and stipulated escalations

Responsibility for SIEMENS and CLIENT:
The CLIENT will notify SIEMENS of any problems with the equipment installed by SIEMENS and provide the necessary access to the affected equipment and systems. SIEMENS shall then determine the best course of action to ensure correct operation and to maintain the Performance Guarantee. Unintended changes in operation of systems associated with the FIMs by the CLIENT may require Baseline adjustments.

Baseline Adjustments:
Changes in equipment operation due to fluctuating weather conditions, extended or contracted operating schedules, population changes, or changes in functionality; may change power and energy consumption and require adjustments to the pre-retrofit Baseline models. The Annual Performance Assurance Report will document changes in conditions that may affect Savings persistence.

Specifications on Measurement Tools:

- Cellular Power Logger

Article 5: Baseline Data

5.1 The year selected as the Baseline Period for the Water Meter/AMI FIM starts February 2015 and ends January 2016. Table 5.1 outlines the water volumes metered during this Baseline Period for each billing tier. This Baseline Period's water consumption will be used as the reference for comparing the calculated metered water volumes during the Performance Guarantee Period in order to determine the Annual Realized Savings.

Table 5.1 – Baseline Metered Water Volume for Each Billing Tier

TIER NUMBER	TIER NAME	V_{pre} [kgal] Metered Data @ current accuracy
1	Water - Residential - 5/8" - Tier 1	502,616
2	Water - Residential - 5/8" - Tier 2	754,815
3	Water - Residential - 5/8" - Tier 3	313,437
4	Water - Residential - 3/4" - Tier 1	491,231
5	Water - Residential - 3/4" - Tier 2	1,110,835
6	Water - Residential - 3/4" - Tier 3	729,545
7	Water - Residential - 1" - Tier 1	394,765
8	Water - Residential - 1" - Tier 2	1,031,179
9	Water - Residential - 1" - Tier 3	1,068,777
10	Water - Residential - 1.5" - Tier 1	940
11	Water - Residential - 1.5" - Tier 2	2,381
12	Water - Residential - 1.5" - Tier 3	2,201
13	Water - Residential - 2" - Tier 1	1,112
14	Water - Residential - 2" - Tier 2	2,011
15	Water - Residential - 2" - Tier 3	332
16	Non-Residential - 5/8" - Tier 1	52,656
17	Non-Residential - 5/8" - Tier 2	472
18	Non-Residential - 3/4" - Tier 1	37,164
19	Non-Residential - 3/4" - Tier 2	0
20	Non-Residential - 1" - Tier 1	169,409
21	Non-Residential - 1" - Tier 2	47,859
22	Non-Residential - 1.5" - Tier 1	31,129
23	Non-Residential - 1.5" - Tier 2	12,049
24	Non-Residential - 2" - Tier 1	208,128
25	Non-Residential - 2" - Tier 2	123,723
26	Sprinkler - 5/8" - Tier 1	155,872
27	Sprinkler - 5/8" - Tier 2	735
28	Sprinkler - 3/4" - Tier 1	547,510
29	Sprinkler - 3/4" - Tier 2	7,658
30	Sprinkler - 1" - Tier 1	361,839
31	Sprinkler - 1" - Tier 2	10,306
32	Sprinkler - 1.5" - Tier 1	59,202

TIER NUMBER	TIER NAME	V_{pre} [kgal] Metered Data @ current accuracy
33	Sprinkler - 1.5" - Tier 2	56,519
34	Sprinkler - 2" - Tier 1	79,576
35	Sprinkler - 2" - Tier 2	81,807
Note: Column V_{pre} is baseline data for baseline time period at current accuracies listed in Table 5.2.		

As previously mentioned, the calculation of total additional water billed resulting from the meter retrofit FIM will be based on a comparison between the average efficiency of the old meter population (those meters in the Baseline) and the tested efficiency of the new meters. The increase in efficiency (differential meter efficiency) is multiplied by the Baseline annual cumulative water for the system or meter size grouping, as applicable. The result is the amount of recaptured water for the system or that meter group. The table above shows the results of the Baseline analysis and shows the amount of recaptured water for the system associated with the given meter sizes and classifications.

This process is repeated for each meter group in the Baseline listing, if applicable. The sum of these amounts of reclaimed water is the total amount of unbilled water under the Performance Guarantee.

The water meter Baseline accuracy for each year of the Performance Guarantee Period is defined in Table 5.2 while the aggregate Baseline accuracy for all meters tested is shown in Equation 5.1.

Table 5.2 – Existing Meter Accuracy From Test Data

Item	Description	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
1	Water - Residential - 5/8" - Tier 1	76.00%	76.00%	75.50%	75.00%	74.50%	74.00%	73.50%	73.00%
2	Water - Residential - 5/8" - Tier 2	76.00%	76.00%	75.50%	75.00%	74.50%	74.00%	73.50%	73.00%
3	Water - Residential - 5/8" - Tier 3	76.00%	76.00%	75.50%	75.00%	74.50%	74.00%	73.50%	73.00%
4	Water - Residential - 3/4" - Tier 1	94.40%	94.40%	93.90%	93.40%	92.90%	92.40%	91.90%	91.40%
5	Water - Residential - 3/4" - Tier 2	94.40%	94.40%	93.90%	93.40%	92.90%	92.40%	91.90%	91.40%
6	Water - Residential - 3/4" - Tier 3	94.40%	94.40%	93.90%	93.40%	92.90%	92.40%	91.90%	91.40%
7	Water - Residential - 1" - Tier 1	87.70%	87.70%	87.20%	86.70%	86.20%	85.70%	85.20%	84.70%
8	Water - Residential - 1" - Tier 2	87.70%	87.70%	87.20%	86.70%	86.20%	85.70%	85.20%	84.70%
9	Water - Residential - 1" - Tier 3	87.70%	87.70%	87.20%	86.70%	86.20%	85.70%	85.20%	84.70%
10	Water - Residential - 1.5" - Tier 1	96.80%	96.80%	96.30%	95.80%	95.30%	94.80%	94.30%	93.80%
11	Water - Residential - 1.5" - Tier 2	96.80%	96.80%	96.30%	95.80%	95.30%	94.80%	94.30%	93.80%
12	Water - Residential - 1.5" - Tier 3	96.80%	96.80%	96.30%	95.80%	95.30%	94.80%	94.30%	93.80%
13	Water - Residential - 2" - Tier 1	93.90%	93.90%	93.40%	92.90%	92.40%	91.90%	91.40%	90.90%
14	Water - Residential - 2" - Tier 2	93.90%	93.90%	93.40%	92.90%	92.40%	91.90%	91.40%	90.90%
15	Water - Residential - 2" - Tier 3	93.90%	93.90%	93.40%	92.90%	92.40%	91.90%	91.40%	90.90%
16	Non-Residential - 5/8" - Tier 1	76.00%	76.00%	75.50%	75.00%	74.50%	74.00%	73.50%	73.00%

Item	Description	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
17	Non-Residential - 5/8" - Tier 2	76.00%	76.00%	75.50%	75.00%	74.50%	74.00%	73.50%	73.00%
18	Non-Residential - 3/4" - Tier 1	94.40%	94.40%	93.90%	93.40%	92.90%	92.40%	91.90%	91.40%
19	Non-Residential - 3/4" - Tier 2	94.40%	94.40%	93.90%	93.40%	92.90%	92.40%	91.90%	91.40%
20	Non-Residential - 1" - Tier 1	87.70%	87.70%	87.20%	86.70%	86.20%	85.70%	85.20%	84.70%
21	Non-Residential - 1" - Tier 2	87.70%	87.70%	87.20%	86.70%	86.20%	85.70%	85.20%	84.70%
22	Non-Residential - 1.5" - Tier 1	96.80%	96.80%	96.30%	95.80%	95.30%	94.80%	94.30%	93.80%
23	Non-Residential - 1.5" - Tier 2	96.80%	96.80%	96.30%	95.80%	95.30%	94.80%	94.30%	93.80%
24	Non-Residential - 2" - Tier 1	93.90%	93.90%	93.40%	92.90%	92.40%	91.90%	91.40%	90.90%
25	Non-Residential - 2" - Tier 2	93.90%	93.90%	93.40%	92.90%	92.40%	91.90%	91.40%	90.90%
26	Sprinkler - 5/8" - Tier 1	76.00%	76.00%	75.50%	75.00%	74.50%	74.00%	73.50%	73.00%
27	Sprinkler - 5/8" - Tier 2	76.00%	76.00%	75.50%	75.00%	74.50%	74.00%	73.50%	73.00%
28	Sprinkler - 3/4" - Tier 1	94.40%	94.40%	93.90%	93.40%	92.90%	92.40%	91.90%	91.40%
29	Sprinkler - 3/4" - Tier 2	94.40%	94.40%	93.90%	93.40%	92.90%	92.40%	91.90%	91.40%
30	Sprinkler - 1" - Tier 1	87.70%	87.70%	87.20%	86.70%	86.20%	85.70%	85.20%	84.70%
31	Sprinkler - 1" - Tier 2	87.70%	87.70%	87.20%	86.70%	86.20%	85.70%	85.20%	84.70%
32	Sprinkler - 1.5" - Tier 1	96.80%	96.80%	96.30%	95.80%	95.30%	94.80%	94.30%	93.80%
33	Sprinkler - 1.5" - Tier 2	96.80%	96.80%	96.30%	95.80%	95.30%	94.80%	94.30%	93.80%
34	Sprinkler - 2" - Tier 1	93.90%	93.90%	93.40%	92.90%	92.40%	91.90%	91.40%	90.90%
35	Sprinkler - 2" - Tier 2	93.90%	93.90%	93.40%	92.90%	92.40%	91.90%	91.40%	90.90%

Item	Description	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
1	Water - Residential - 5/8" - Tier 1	72.50%	72.00%	71.50%	71.00%	70.50%	70.00%	69.50%	69.00%
2	Water - Residential - 5/8" - Tier 2	72.50%	72.00%	71.50%	71.00%	70.50%	70.00%	69.50%	69.00%
3	Water - Residential - 5/8" - Tier 3	72.50%	72.00%	71.50%	71.00%	70.50%	70.00%	69.50%	69.00%
4	Water - Residential - 3/4" - Tier 1	90.90%	90.40%	89.90%	89.40%	88.90%	88.40%	87.90%	87.40%
5	Water - Residential - 3/4" - Tier 2	90.90%	90.40%	89.90%	89.40%	88.90%	88.40%	87.90%	87.40%
6	Water - Residential - 3/4" - Tier 3	90.90%	90.40%	89.90%	89.40%	88.90%	88.40%	87.90%	87.40%
7	Water - Residential - 1" - Tier 1	84.20%	83.70%	83.20%	82.70%	82.20%	81.70%	81.20%	80.70%
8	Water - Residential - 1" - Tier 2	84.20%	83.70%	83.20%	82.70%	82.20%	81.70%	81.20%	80.70%
9	Water - Residential - 1" - Tier 3	84.20%	83.70%	83.20%	82.70%	82.20%	81.70%	81.20%	80.70%
10	Water - Residential - 1.5" - Tier 1	93.30%	92.80%	92.30%	91.80%	91.30%	0.00%	0.00%	0.00%
11	Water - Residential - 1.5" - Tier 2	93.30%	92.80%	92.30%	91.80%	91.30%	0.00%	0.00%	0.00%
12	Water - Residential - 1.5" - Tier 3	93.30%	92.80%	92.30%	91.80%	91.30%	0.00%	0.00%	0.00%
13	Water - Residential - 2" - Tier 1	90.40%	89.90%	89.40%	88.90%	88.40%	0.00%	0.00%	0.00%
14	Water - Residential - 2" - Tier 2	90.40%	89.90%	89.40%	88.90%	88.40%	0.00%	0.00%	0.00%
15	Water - Residential - 2" - Tier 3	90.40%	89.90%	89.40%	88.90%	88.40%	0.00%	0.00%	0.00%
16	Non-Residential - 5/8" - Tier 1	72.50%	72.00%	71.50%	71.00%	70.50%	70.00%	69.50%	69.00%
17	Non-Residential - 5/8" - Tier 2	72.50%	72.00%	71.50%	71.00%	70.50%	70.00%	69.50%	69.00%
18	Non-Residential - 3/4" - Tier 1	90.90%	90.40%	89.90%	89.40%	88.90%	88.40%	87.90%	87.40%

Item	Description	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
19	Non-Residential - 3/4" - Tier 2	90.90%	90.40%	89.90%	89.40%	88.90%	88.40%	87.90%	87.40%
20	Non-Residential - 1" - Tier 1	84.20%	83.70%	83.20%	82.70%	82.20%	81.70%	81.20%	80.70%
21	Non-Residential - 1" - Tier 2	84.20%	83.70%	83.20%	82.70%	82.20%	81.70%	81.20%	80.70%
22	Non-Residential - 1.5" - Tier 1	93.30%	92.80%	92.30%	91.80%	91.30%	0.00%	0.00%	0.00%
23	Non-Residential - 1.5" - Tier 2	93.30%	92.80%	92.30%	91.80%	91.30%	0.00%	0.00%	0.00%
24	Non-Residential - 2" - Tier 1	90.40%	89.90%	89.40%	88.90%	88.40%	0.00%	0.00%	0.00%
25	Non-Residential - 2" - Tier 2	90.40%	89.90%	89.40%	88.90%	88.40%	0.00%	0.00%	0.00%
26	Sprinkler - 5/8" - Tier 1	72.50%	72.00%	71.50%	71.00%	70.50%	70.00%	69.50%	69.00%
27	Sprinkler - 5/8" - Tier 2	72.50%	72.00%	71.50%	71.00%	70.50%	70.00%	69.50%	69.00%
28	Sprinkler - 3/4" - Tier 1	90.90%	90.40%	89.90%	89.40%	88.90%	88.40%	87.90%	87.40%
29	Sprinkler - 3/4" - Tier 2	90.90%	90.40%	89.90%	89.40%	88.90%	88.40%	87.90%	87.40%
30	Sprinkler - 1" - Tier 1	84.20%	83.70%	83.20%	82.70%	82.20%	81.70%	81.20%	80.70%
31	Sprinkler - 1" - Tier 2	84.20%	83.70%	83.20%	82.70%	82.20%	81.70%	81.20%	80.70%
32	Sprinkler - 1.5" - Tier 1	93.30%	92.80%	92.30%	91.80%	91.30%	0.00%	0.00%	0.00%
33	Sprinkler - 1.5" - Tier 2	93.30%	92.80%	92.30%	91.80%	91.30%	0.00%	0.00%	0.00%
34	Sprinkler - 2" - Tier 1	90.40%	89.90%	89.40%	88.90%	88.40%	0.00%	0.00%	0.00%
35	Sprinkler - 2" - Tier 2	90.40%	89.90%	89.40%	88.90%	88.40%	0.00%	0.00%	0.00%

Item	Description	Year 16	Year 17	Year 18	Year 19	Year 20
1	Water - Residential - 5/8" - Tier 1	68.50%	68.00%	67.50%	67.00%	66.50%
2	Water - Residential - 5/8" - Tier 2	68.50%	68.00%	67.50%	67.00%	66.50%
3	Water - Residential - 5/8" - Tier 3	68.50%	68.00%	67.50%	67.00%	66.50%
4	Water - Residential - 3/4" - Tier 1	86.90%	86.40%	85.90%	85.40%	84.90%
5	Water - Residential - 3/4" - Tier 2	86.90%	86.40%	85.90%	85.40%	84.90%
6	Water - Residential - 3/4" - Tier 3	86.90%	86.40%	85.90%	85.40%	84.90%
7	Water - Residential - 1" - Tier 1	80.20%	79.70%	79.20%	78.70%	78.20%
8	Water - Residential - 1" - Tier 2	80.20%	79.70%	79.20%	78.70%	78.20%
9	Water - Residential - 1" - Tier 3	80.20%	79.70%	79.20%	78.70%	78.20%
10	Water - Residential - 1.5" - Tier 1	0.00%	0.00%	0.00%	0.00%	0.00%
11	Water - Residential - 1.5" - Tier 2	0.00%	0.00%	0.00%	0.00%	0.00%
12	Water - Residential - 1.5" - Tier 3	0.00%	0.00%	0.00%	0.00%	0.00%
13	Water - Residential - 2" - Tier 1	0.00%	0.00%	0.00%	0.00%	0.00%
14	Water - Residential - 2" - Tier 2	0.00%	0.00%	0.00%	0.00%	0.00%
15	Water - Residential - 2" - Tier 3	0.00%	0.00%	0.00%	0.00%	0.00%
16	Non-Residential - 5/8" - Tier 1	68.50%	68.00%	67.50%	67.00%	66.50%
17	Non-Residential - 5/8" - Tier 2	68.50%	68.00%	67.50%	67.00%	66.50%
18	Non-Residential - 3/4" - Tier 1	86.90%	86.40%	85.90%	85.40%	84.90%
19	Non-Residential - 3/4" - Tier 2	86.90%	86.40%	85.90%	85.40%	84.90%
20	Non-Residential - 1" - Tier 1	80.20%	79.70%	79.20%	78.70%	78.20%

Item	Description	Year 16	Year 17	Year 18	Year 19	Year 20
21	Non-Residential - 1" - Tier 2	80.20%	79.70%	79.20%	78.70%	78.20%
22	Non-Residential - 1.5" - Tier 1	0.00%	0.00%	0.00%	0.00%	0.00%
23	Non-Residential - 1.5" - Tier 2	0.00%	0.00%	0.00%	0.00%	0.00%
24	Non-Residential - 2" - Tier 1	0.00%	0.00%	0.00%	0.00%	0.00%
25	Non-Residential - 2" - Tier 2	0.00%	0.00%	0.00%	0.00%	0.00%
26	Sprinkler - 5/8" - Tier 1	68.50%	68.00%	67.50%	67.00%	66.50%
27	Sprinkler - 5/8" - Tier 2	68.50%	68.00%	67.50%	67.00%	66.50%
28	Sprinkler - 3/4" - Tier 1	86.90%	86.40%	85.90%	85.40%	84.90%
29	Sprinkler - 3/4" - Tier 2	86.90%	86.40%	85.90%	85.40%	84.90%
30	Sprinkler - 1" - Tier 1	80.20%	79.70%	79.20%	78.70%	78.20%
31	Sprinkler - 1" - Tier 2	80.20%	79.70%	79.20%	78.70%	78.20%
32	Sprinkler - 1.5" - Tier 1	0.00%	0.00%	0.00%	0.00%	0.00%
33	Sprinkler - 1.5" - Tier 2	0.00%	0.00%	0.00%	0.00%	0.00%
34	Sprinkler - 2" - Tier 1	0.00%	0.00%	0.00%	0.00%	0.00%
35	Sprinkler - 2" - Tier 2	0.00%	0.00%	0.00%	0.00%	0.00%

Table 5.3 shows the Baseline Utility demand and consumption for the following FIMs: WWTP Aeration System Improvements, and WWTP Digester replacements. The baseline used for WWTP FIMs

Table 5.3 – Baseline Utility Consumption for Non Water Meter FIMs

FIM	Electrical Consumption (kWh)	Electrical Demand (kW)
WWTP Aeration System	2,374,560	4,626
WWTP Digester Blowers	414,918	48.8

5.2 The operating practices during the Baseline Period determine the utility consumption shown in Table 5.1 and 5.3. This data indicates the operating characteristics that were in effect during the Baseline Period. The Guaranteed Savings provided under this Agreement are based on the efficiencies gained by implementing the Work and implementing the Contracted Baseline in Article 7 of this Exhibit C.

Changes in equipment operation due to fluctuating weather conditions, extended or contracted operating schedules, population changes, or changes in functionality; may change power and energy consumption and require adjustments to the pre-retrofit Baseline models. The Annual Performance Assurance Report will document changes in conditions that may affect Savings persistence.

5.3 Applicable codes - Federal, State, County or Municipal codes or regulations are applicable to the use and operation of the Facility. SIEMENS will maintain the current level of Facility compliance relative to applicable codes. Unless specifically set forth in the Scope

of Work and Services, Exhibit A, nothing herein should be construed as to require SIEMENS to provide additional work or services in the event that the current applicable code or regulation is modified.

5.3.1 Current code compliance (identify the applicable code citation): SIEMENS will comply with applicable electrical codes.

5.3.2 Code changes: In the event code changes are made after execution of the Agreement, SIEMENS reserves the right to adjust its pricing to accommodate the new code requirements. Alternatively, the CLIENT may waive new code compliance so that no adjustment to the pricing is necessary.

Article 6: Utility Rate Structures and Escalation Rates

6.1 Utility costs used for Savings calculations will be based on the utility rates and rate escalation percentages, as provided in the table(s) below.

A one and a half percent (1.5%) escalation rate will be applied to the water rates while a three percent (3%) escalation rate will be applied annually to the electric utility rate.

Table 6.1.1 shows the water and sewer rates that are applicable to this project.

Table 6.1.1 – Water and Sewer Rate Structure

	Rate Increase Percentage	2015	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Item	Description	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
1	Water - Residential - 5/8" - Tier 1	$0.390	$0.396	$0.402	$0.408	$0.414	$0.420	$0.426	$0.433
2	Water - Residential - 5/8" - Tier 2	$0.490	$0.497	$0.505	$0.512	$0.520	$0.528	$0.536	$0.544
3	Water - Residential - 5/8" - Tier 3	$0.590	$0.599	$0.608	$0.617	$0.626	$0.636	$0.645	$0.655
4	Water - Residential - 3/4" - Tier 1	$0.390	$0.396	$0.402	$0.408	$0.414	$0.420	$0.426	$0.433
5	Water - Residential - 3/4" - Tier 2	$0.490	$0.497	$0.505	$0.512	$0.520	$0.528	$0.536	$0.544
6	Water - Residential - 3/4" - Tier 3	$0.590	$0.599	$0.608	$0.617	$0.626	$0.636	$0.645	$0.655
7	Water - Residential - 1" - Tier 1	$0.390	$0.396	$0.402	$0.408	$0.414	$0.420	$0.426	$0.433
8	Water - Residential - 1" - Tier 2	$0.490	$0.497	$0.505	$0.512	$0.520	$0.528	$0.536	$0.544
9	Water - Residential - 1" - Tier 3	$0.590	$0.599	$0.608	$0.617	$0.626	$0.636	$0.645	$0.655
10	Water - Residential - 1.5" - Tier 1	$0.390	$0.396	$0.402	$0.408	$0.414	$0.420	$0.426	$0.433
11	Water - Residential - 1.5" - Tier 2	$0.490	$0.497	$0.505	$0.512	$0.520	$0.528	$0.536	$0.544
12	Water - Residential - 1.5" - Tier 3	$0.590	$0.599	$0.608	$0.617	$0.626	$0.636	$0.645	$0.655
13	Water - Residential - 2" - Tier 1	$0.390	$0.396	$0.402	$0.408	$0.414	$0.420	$0.426	$0.433
14	Water - Residential - 2" - Tier 2	$0.490	$0.497	$0.505	$0.512	$0.520	$0.528	$0.536	$0.544
15	Water - Residential - 2" - Tier 3	$0.590	$0.599	$0.608	$0.617	$0.626	$0.636	$0.645	$0.655
16	Non-Residential - 5/8" - Tier 1	$0.515	$0.523	$0.531	$0.539	$0.547	$0.555	$0.563	$0.572
17	Non-Residential - 5/8" - Tier 2	$0.590	$0.599	$0.608	$0.617	$0.626	$0.636	$0.645	$0.655
18	Non-Residential - 3/4" - Tier 1	$0.515	$0.523	$0.531	$0.539	$0.547	$0.555	$0.563	$0.572
19	Non-Residential - 3/4" - Tier 2	$0.590	$0.599	$0.608	$0.617	$0.626	$0.636	$0.645	$0.655
20	Non-Residential - 1" - Tier 1	$0.515	$0.523	$0.531	$0.539	$0.547	$0.555	$0.563	$0.572
21	Non-Residential - 1" - Tier 2	$0.590	$0.599	$0.608	$0.617	$0.626	$0.636	$0.645	$0.655
22	Non-Residential - 1.5" - Tier 1	$0.515	$0.523	$0.531	$0.539	$0.547	$0.555	$0.563	$0.572
23	Non-Residential - 1.5" - Tier 2	$0.590	$0.599	$0.608	$0.617	$0.626	$0.636	$0.645	$0.655
24	Non-Residential - 2" - Tier 1	$0.515	$0.523	$0.531	$0.539	$0.547	$0.555	$0.563	$0.572
25	Non-Residential - 2" - Tier 2	$0.590	$0.599	$0.608	$0.617	$0.626	$0.636	$0.645	$0.655
26	Sprinkler - 5/8" - Tier 1	$0.350	$0.355	$0.361	$0.366	$0.371	$0.377	$0.383	$0.388
27	Sprinkler - 5/8" - Tier 2	$0.400	$0.406	$0.412	$0.418	$0.425	$0.431	$0.437	$0.444
28	Sprinkler - 3/4" - Tier 1	$0.350	$0.355	$0.361	$0.366	$0.371	$0.377	$0.383	$0.388

	Rate Increase Percentage	2015	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Item	Description	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
29	Sprinkler - 3/4" - Tier 2	$0.400	$0.406	$0.412	$0.418	$0.425	$0.431	$0.437	$0.444
30	Sprinkler - 1" - Tier 1	$0.350	$0.355	$0.361	$0.366	$0.371	$0.377	$0.383	$0.388
31	Sprinkler - 1" - Tier 2	$0.400	$0.406	$0.412	$0.418	$0.425	$0.431	$0.437	$0.444
32	Sprinkler - 1.5" - Tier 1	$0.350	$0.355	$0.361	$0.366	$0.371	$0.377	$0.383	$0.388
33	Sprinkler - 1.5" - Tier 2	$0.400	$0.406	$0.412	$0.418	$0.425	$0.431	$0.437	$0.444
34	Sprinkler - 2" - Tier 1	$0.350	$0.355	$0.361	$0.366	$0.371	$0.377	$0.383	$0.388
35	Sprinkler - 2" - Tier 2	$0.400	$0.406	$0.412	$0.418	$0.425	$0.431	$0.437	$0.444

	Rate Increase Percentage	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Item	Description	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
1	Water - Residential - 5/8" - Tier 1	$0.439	$0.446	$0.453	$0.459	$0.466	$0.473	$0.480	$0.488
2	Water - Residential - 5/8" - Tier 2	$0.552	$0.560	$0.569	$0.577	$0.586	$0.595	$0.604	$0.613
3	Water - Residential - 5/8" - Tier 3	$0.665	$0.675	$0.685	$0.695	$0.705	$0.716	$0.727	$0.738
4	Water - Residential - 3/4" - Tier 1	$0.439	$0.446	$0.453	$0.459	$0.466	$0.473	$0.480	$0.488
5	Water - Residential - 3/4" - Tier 2	$0.552	$0.560	$0.569	$0.577	$0.586	$0.595	$0.604	$0.613
6	Water - Residential - 3/4" - Tier 3	$0.665	$0.675	$0.685	$0.695	$0.705	$0.716	$0.727	$0.738
7	Water - Residential - 1" - Tier 1	$0.439	$0.446	$0.453	$0.459	$0.466	$0.473	$0.480	$0.488
8	Water - Residential - 1" - Tier 2	$0.552	$0.560	$0.569	$0.577	$0.586	$0.595	$0.604	$0.613
9	Water - Residential - 1" - Tier 3	$0.665	$0.675	$0.685	$0.695	$0.705	$0.716	$0.727	$0.738
10	Water - Residential - 1.5" - Tier 1	$0.439	$0.446	$0.453	$0.459	$0.466	$0.473	$0.480	$0.488
11	Water - Residential - 1.5" - Tier 2	$0.552	$0.560	$0.569	$0.577	$0.586	$0.595	$0.604	$0.613
12	Water - Residential - 1.5" - Tier 3	$0.665	$0.675	$0.685	$0.695	$0.705	$0.716	$0.727	$0.738
13	Water - Residential - 2" - Tier 1	$0.439	$0.446	$0.453	$0.459	$0.466	$0.473	$0.480	$0.488
14	Water - Residential - 2" - Tier 2	$0.552	$0.560	$0.569	$0.577	$0.586	$0.595	$0.604	$0.613
15	Water - Residential - 2" - Tier 3	$0.665	$0.675	$0.685	$0.695	$0.705	$0.716	$0.727	$0.738
16	Non-Residential - 5/8" - Tier 1	$0.580	$0.589	$0.598	$0.607	$0.616	$0.625	$0.634	$0.644
17	Non-Residential - 5/8" - Tier 2	$0.665	$0.675	$0.685	$0.695	$0.705	$0.716	$0.727	$0.738
18	Non-Residential - 3/4" - Tier 1	$0.580	$0.589	$0.598	$0.607	$0.616	$0.625	$0.634	$0.644
19	Non-Residential - 3/4" - Tier 2	$0.665	$0.675	$0.685	$0.695	$0.705	$0.716	$0.727	$0.738
20	Non-Residential - 1" - Tier 1	$0.580	$0.589	$0.598	$0.607	$0.616	$0.625	$0.634	$0.644
21	Non-Residential - 1" - Tier 2	$0.665	$0.675	$0.685	$0.695	$0.705	$0.716	$0.727	$0.738
22	Non-Residential - 1.5" - Tier 1	$0.580	$0.589	$0.598	$0.607	$0.616	$0.625	$0.634	$0.644
23	Non-Residential - 1.5" - Tier 2	$0.665	$0.675	$0.685	$0.695	$0.705	$0.716	$0.727	$0.738
24	Non-Residential - 2" - Tier 1	$0.580	$0.589	$0.598	$0.607	$0.616	$0.625	$0.634	$0.644
25	Non-Residential - 2" - Tier 2	$0.665	$0.675	$0.685	$0.695	$0.705	$0.716	$0.727	$0.738
26	Sprinkler - 5/8" - Tier 1	$0.394	$0.400	$0.406	$0.412	$0.418	$0.425	$0.431	$0.438
27	Sprinkler - 5/8" - Tier 2	$0.451	$0.457	$0.464	$0.471	$0.478	$0.485	$0.493	$0.500
28	Sprinkler - 3/4" - Tier 1	$0.394	$0.400	$0.406	$0.412	$0.418	$0.425	$0.431	$0.438

	Rate Increase Percentage	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Item	Description	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
29	Sprinkler - 3/4" - Tier 2	$0.451	$0.457	$0.464	$0.471	$0.478	$0.485	$0.493	$0.500
30	Sprinkler - 1" - Tier 1	$0.394	$0.400	$0.406	$0.412	$0.418	$0.425	$0.431	$0.438
31	Sprinkler - 1" - Tier 2	$0.451	$0.457	$0.464	$0.471	$0.478	$0.485	$0.493	$0.500
32	Sprinkler - 1.5" - Tier 1	$0.394	$0.400	$0.406	$0.412	$0.418	$0.425	$0.431	$0.438
33	Sprinkler - 1.5" - Tier 2	$0.451	$0.457	$0.464	$0.471	$0.478	$0.485	$0.493	$0.500
34	Sprinkler - 2" - Tier 1	$0.394	$0.400	$0.406	$0.412	$0.418	$0.425	$0.431	$0.438
35	Sprinkler - 2" - Tier 2	$0.451	$0.457	$0.464	$0.471	$0.478	$0.485	$0.493	$0.500

	Rate Increase Percentage	1.5%	1.5%	1.5%	1.5%	1.5%
Item	Description	Year 16	Year 17	Year 18	Year 19	Year 20
1	Water - Residential - 5/8" - Tier 1	$0.495	$0.502	$0.510	$0.518	$0.525
2	Water - Residential - 5/8" - Tier 2	$0.622	$0.631	$0.641	$0.650	$0.660
3	Water - Residential - 5/8" - Tier 3	$0.749	$0.760	$0.771	$0.783	$0.795
4	Water - Residential - 3/4" - Tier 1	$0.495	$0.502	$0.510	$0.518	$0.525
5	Water - Residential - 3/4" - Tier 2	$0.622	$0.631	$0.641	$0.650	$0.660
6	Water - Residential - 3/4" - Tier 3	$0.749	$0.760	$0.771	$0.783	$0.795
7	Water - Residential - 1" - Tier 1	$0.495	$0.502	$0.510	$0.518	$0.525
8	Water - Residential - 1" - Tier 2	$0.622	$0.631	$0.641	$0.650	$0.660
9	Water - Residential - 1" - Tier 3	$0.749	$0.760	$0.771	$0.783	$0.795
10	Water - Residential - 1.5" - Tier 1	$0.495	$0.502	$0.510	$0.518	$0.525
11	Water - Residential - 1.5" - Tier 2	$0.622	$0.631	$0.641	$0.650	$0.660
12	Water - Residential - 1.5" - Tier 3	$0.749	$0.760	$0.771	$0.783	$0.795
13	Water - Residential - 2" - Tier 1	$0.495	$0.502	$0.510	$0.518	$0.525
14	Water - Residential - 2" - Tier 2	$0.622	$0.631	$0.641	$0.650	$0.660
15	Water - Residential - 2" - Tier 3	$0.749	$0.760	$0.771	$0.783	$0.795
16	Non-Residential - 5/8" - Tier 1	$0.654	$0.663	$0.673	$0.683	$0.694
17	Non-Residential - 5/8" - Tier 2	$0.749	$0.760	$0.771	$0.783	$0.795
18	Non-Residential - 3/4" - Tier 1	$0.654	$0.663	$0.673	$0.683	$0.694
19	Non-Residential - 3/4" - Tier 2	$0.749	$0.760	$0.771	$0.783	$0.795
20	Non-Residential - 1" - Tier 1	$0.654	$0.663	$0.673	$0.683	$0.694
21	Non-Residential - 1" - Tier 2	$0.749	$0.760	$0.771	$0.783	$0.795
22	Non-Residential - 1.5" - Tier 1	$0.654	$0.663	$0.673	$0.683	$0.694
23	Non-Residential - 1.5" - Tier 2	$0.749	$0.760	$0.771	$0.783	$0.795
24	Non-Residential - 2" - Tier 1	$0.654	$0.663	$0.673	$0.683	$0.694
25	Non-Residential - 2" - Tier 2	$0.749	$0.760	$0.771	$0.783	$0.795
26	Sprinkler - 5/8" - Tier 1	$0.444	$0.451	$0.458	$0.464	$0.471
27	Sprinkler - 5/8" - Tier 2	$0.508	$0.515	$0.523	$0.531	$0.539
28	Sprinkler - 3/4" - Tier 1	$0.444	$0.451	$0.458	$0.464	$0.471

	Rate Increase Percentage	1.5%	1.5%	1.5%	1.5%	1.5%
Item	Description	Year 16	Year 17	Year 18	Year 19	Year 20
29	Sprinkler - 3/4" - Tier 2	$0.508	$0.515	$0.523	$0.531	$0.539
30	Sprinkler - 1" - Tier 1	$0.444	$0.451	$0.458	$0.464	$0.471
31	Sprinkler - 1" - Tier 2	$0.508	$0.515	$0.523	$0.531	$0.539
32	Sprinkler - 1.5" - Tier 1	$0.444	$0.451	$0.458	$0.464	$0.471
33	Sprinkler - 1.5" - Tier 2	$0.508	$0.515	$0.523	$0.531	$0.539
34	Sprinkler - 2" - Tier 1	$0.444	$0.451	$0.458	$0.464	$0.471
35	Sprinkler - 2" - Tier 2	$0.508	$0.515	$0.523	$0.531	$0.539

NAME OF ELECTRIC UTILITY:

- Unregulated Retail Electric Provider: Texas General Land Office
- Regulated Transmission and Distribution Service Provider: Centerpoint Energy

TABLE 6.1.2 - SUMMARY OF APPLICABLE TDSP RATE CODES

Rate Class/Code	Rate Description	$/kWh	$/kVA
360	Secondary Service 51 KVA or Greater / LF > 10%	$0.06076	$5.93628

The $/kWh component includes the fixed REP contracted rate of $0.05147.

TABLE 6.1.3 - SUMMARY OF APPLICABLE ELECTRIC BILLING ACCOUNTS

ESI ID	Rate Class/Code	$/kWh	$/kVA	Function
10089010249005924701l2	360	$0.06076	$5.93628	WWTP

Article 7: Contracted Baseline Data

7.1 The following tables details the water meter and electrical operating parameters that are required to be implemented on the Guarantee Date or on such time as agreed upon by the Parties. This specific configuration of facility operating parameters is the Contracted Baseline. The failure of the CLIENT to maintain the Contracted Baseline may result in a Material Change which may require a modification of the Performance Guarantee pursuant to Article 4 of the Agreement.

Table 7.1 – Proposed Water Meter Accuracy

Item	Description	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
1	Water - Residential - 5/8" - Tier 1	97.98%	97.98%	97.98%	97.98%	97.98%	97.98%	97.23%	96.93%
2	Water - Residential - 5/8" - Tier 2	97.98%	97.98%	97.98%	97.98%	97.98%	97.98%	97.23%	96.93%
3	Water - Residential - 5/8" - Tier 3	97.98%	97.98%	97.98%	97.98%	97.98%	97.98%	97.23%	96.93%
4	Water - Residential - 3/4" - Tier 1	97.98%	97.98%	97.98%	97.98%	97.98%	97.98%	97.23%	96.93%
5	Water - Residential - 3/4" - Tier 2	97.98%	97.98%	97.98%	97.98%	97.98%	97.98%	97.23%	96.93%
6	Water - Residential - 3/4" - Tier 3	97.98%	97.98%	97.98%	97.98%	97.98%	97.98%	97.23%	96.93%
7	Water - Residential - 1" - Tier 1	97.98%	97.98%	97.98%	97.98%	97.98%	97.98%	97.23%	96.93%
8	Water - Residential - 1" - Tier 2	97.98%	97.98%	97.98%	97.98%	97.98%	97.98%	97.23%	96.93%
9	Water - Residential - 1" - Tier 3	97.98%	97.98%	97.98%	97.98%	97.98%	97.98%	97.23%	96.93%
10	Water - Residential - 1.5" - Tier 1	97.98%	97.98%	97.98%	97.23%	96.93%	96.64%	96.35%	96.06%
11	Water - Residential - 1.5" - Tier 2	97.98%	97.98%	97.98%	97.23%	96.93%	96.64%	96.35%	96.06%
12	Water - Residential - 1.5" - Tier 3	97.98%	97.98%	97.98%	97.23%	96.93%	96.64%	96.35%	96.06%
13	Water - Residential - 2" - Tier 1	97.98%	97.98%	97.98%	97.23%	96.93%	96.64%	96.35%	96.06%
14	Water - Residential - 2" - Tier 2	97.98%	97.98%	97.98%	97.23%	96.93%	96.64%	96.35%	96.06%
15	Water - Residential - 2" - Tier 3	97.98%	97.98%	97.98%	97.23%	96.93%	96.64%	96.35%	96.06%
16	Non-Residential - 5/8" - Tier 1	97.98%	97.98%	97.98%	97.98%	97.98%	97.98%	97.23%	96.93%
17	Non-Residential - 5/8" - Tier 2	97.98%	97.98%	97.98%	97.98%	97.98%	97.98%	97.23%	96.93%
18	Non-Residential - 3/4" - Tier 1	97.98%	97.98%	97.98%	97.98%	97.98%	97.98%	97.23%	96.93%
19	Non-Residential - 3/4" - Tier 2	97.98%	97.98%	97.98%	97.98%	97.98%	97.98%	97.23%	96.93%
20	Non-Residential - 1" - Tier 1	97.98%	97.98%	97.98%	97.98%	97.98%	97.98%	97.23%	96.93%
21	Non-Residential - 1" - Tier 2	97.98%	97.98%	97.98%	97.98%	97.98%	97.98%	97.23%	96.93%
22	Non-Residential - 1.5" - Tier 1	97.98%	97.98%	97.98%	97.23%	96.93%	96.64%	96.35%	96.06%
23	Non-Residential - 1.5" - Tier 2	97.98%	97.98%	97.98%	97.23%	96.93%	96.64%	96.35%	96.06%
24	Non-Residential - 2" - Tier 1	97.98%	97.98%	97.98%	97.23%	96.93%	96.64%	96.35%	96.06%
25	Non-Residential - 2" - Tier 2	97.98%	97.98%	97.98%	97.23%	96.93%	96.64%	96.35%	96.06%
26	Sprinkler - 5/8" - Tier 1	97.98%	97.98%	97.98%	97.98%	97.98%	97.98%	97.23%	96.93%
27	Sprinkler - 5/8" - Tier 2	97.98%	97.98%	97.98%	97.98%	97.98%	97.98%	97.23%	96.93%
28	Sprinkler - 3/4" - Tier 1	97.98%	97.98%	97.98%	97.98%	97.98%	97.98%	97.23%	96.93%
29	Sprinkler - 3/4" - Tier 2	97.98%	97.98%	97.98%	97.98%	97.98%	97.98%	97.23%	96.93%
30	Sprinkler - 1" - Tier 1	97.98%	97.98%	97.98%	97.98%	97.98%	97.98%	97.23%	96.93%
31	Sprinkler - 1" - Tier 2	97.98%	97.98%	97.98%	97.98%	97.98%	97.98%	97.23%	96.93%

Item	Description	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
32	Sprinkler - 1.5" - Tier 1	97.98%	97.98%	97.98%	97.23%	96.93%	96.64%	96.35%	96.06%
33	Sprinkler - 1.5" - Tier 2	97.98%	97.98%	97.98%	97.23%	96.93%	96.64%	96.35%	96.06%
34	Sprinkler - 2" - Tier 1	97.98%	97.98%	97.98%	97.23%	96.93%	96.64%	96.35%	96.06%
35	Sprinkler - 2" - Tier 2	97.98%	97.98%	97.98%	97.23%	96.93%	96.64%	96.35%	96.06%

Item	Description	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
1	Water - Residential - 5/8" - Tier 1	96.64%	96.35%	96.06%	95.78%	95.49%	95.20%	94.92%	94.63%
2	Water - Residential - 5/8" - Tier 2	96.64%	96.35%	96.06%	95.78%	95.49%	95.20%	94.92%	94.63%
3	Water - Residential - 5/8" - Tier 3	96.64%	96.35%	96.06%	95.78%	95.49%	95.20%	94.92%	94.63%
4	Water - Residential - 3/4" - Tier 1	96.64%	96.35%	96.06%	95.78%	95.49%	95.20%	94.92%	94.63%
5	Water - Residential - 3/4" - Tier 2	96.64%	96.35%	96.06%	95.78%	95.49%	95.20%	94.92%	94.63%
6	Water - Residential - 3/4" - Tier 3	96.64%	96.35%	96.06%	95.78%	95.49%	95.20%	94.92%	94.63%
7	Water - Residential - 1" - Tier 1	96.64%	96.35%	96.06%	95.78%	95.49%	95.20%	94.92%	94.63%
8	Water - Residential - 1" - Tier 2	96.64%	96.35%	96.06%	95.78%	95.49%	95.20%	94.92%	94.63%
9	Water - Residential - 1" - Tier 3	96.64%	96.35%	96.06%	95.78%	95.49%	95.20%	94.92%	94.63%
10	Water - Residential - 1.5" - Tier 1	95.78%	95.49%	95.20%	94.92%	94.63%	0.00%	0.00%	0.00%
11	Water - Residential - 1.5" - Tier 2	95.78%	95.49%	95.20%	94.92%	94.63%	0.00%	0.00%	0.00%
12	Water - Residential - 1.5" - Tier 3	95.78%	95.49%	95.20%	94.92%	94.63%	0.00%	0.00%	0.00%
13	Water - Residential - 2" - Tier 1	95.78%	95.49%	95.20%	94.92%	94.63%	0.00%	0.00%	0.00%
14	Water - Residential - 2" - Tier 2	95.78%	95.49%	95.20%	94.92%	94.63%	0.00%	0.00%	0.00%
15	Water - Residential - 2" - Tier 3	95.78%	95.49%	95.20%	94.92%	94.63%	0.00%	0.00%	0.00%
16	Non-Residential - 5/8" - Tier 1	96.64%	96.35%	96.06%	95.78%	95.49%	95.20%	94.92%	94.63%
17	Non-Residential - 5/8" - Tier 2	96.64%	96.35%	96.06%	95.78%	95.49%	95.20%	94.92%	94.63%
18	Non-Residential - 3/4" - Tier 1	96.64%	96.35%	96.06%	95.78%	95.49%	95.20%	94.92%	94.63%
19	Non-Residential - 3/4" - Tier 2	96.64%	96.35%	96.06%	95.78%	95.49%	95.20%	94.92%	94.63%
20	Non-Residential - 1" - Tier 1	96.64%	96.35%	96.06%	95.78%	95.49%	95.20%	94.92%	94.63%
21	Non-Residential - 1" - Tier 2	96.64%	96.35%	96.06%	95.78%	95.49%	95.20%	94.92%	94.63%
22	Non-Residential - 1.5" - Tier 1	95.78%	95.49%	95.20%	94.92%	94.63%	0.00%	0.00%	0.00%
23	Non-Residential - 1.5" - Tier 2	95.78%	95.49%	95.20%	94.92%	94.63%	0.00%	0.00%	0.00%
24	Non-Residential - 2" - Tier 1	95.78%	95.49%	95.20%	94.92%	94.63%	0.00%	0.00%	0.00%
25	Non-Residential - 2" - Tier 2	95.78%	95.49%	95.20%	94.92%	94.63%	0.00%	0.00%	0.00%
26	Sprinkler - 5/8" - Tier 1	96.64%	96.35%	96.06%	95.78%	95.49%	95.20%	94.92%	94.63%
27	Sprinkler - 5/8" - Tier 2	96.64%	96.35%	96.06%	95.78%	95.49%	95.20%	94.92%	94.63%
28	Sprinkler - 3/4" - Tier 1	96.64%	96.35%	96.06%	95.78%	95.49%	95.20%	94.92%	94.63%
29	Sprinkler - 3/4" - Tier 2	96.64%	96.35%	96.06%	95.78%	95.49%	95.20%	94.92%	94.63%
30	Sprinkler - 1" - Tier 1	96.64%	96.35%	96.06%	95.78%	95.49%	95.20%	94.92%	94.63%
31	Sprinkler - 1" - Tier 2	96.64%	96.35%	96.06%	95.78%	95.49%	95.20%	94.92%	94.63%
32	Sprinkler - 1.5" - Tier 1	95.78%	95.49%	95.20%	94.92%	94.63%	0.00%	0.00%	0.00%
33	Sprinkler - 1.5" - Tier 2	95.78%	95.49%	95.20%	94.92%	94.63%	0.00%	0.00%	0.00%
34	Sprinkler - 2" - Tier 1	95.78%	95.49%	95.20%	94.92%	94.63%	0.00%	0.00%	0.00%

Item	Description	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
35	Sprinkler - 2" - Tier 2	95.78%	95.49%	95.20%	94.92%	94.63%	0.00%	0.00%	0.00%

Item	Description	Year 16	Year 17	Year 18	Year 19	Year 20
1	Water - Residential - 5/8" - Tier 1	94.35%	94.06%	93.78%	93.50%	93.22%
2	Water - Residential - 5/8" - Tier 2	94.35%	94.06%	93.78%	93.50%	93.22%
3	Water - Residential - 5/8" - Tier 3	94.35%	94.06%	93.78%	93.50%	93.22%
4	Water - Residential - 3/4" - Tier 1	94.35%	94.06%	93.78%	93.50%	93.22%
5	Water - Residential - 3/4" - Tier 2	94.35%	94.06%	93.78%	93.50%	93.22%
6	Water - Residential - 3/4" - Tier 3	94.35%	94.06%	93.78%	93.50%	93.22%
7	Water - Residential - 1" - Tier 1	94.35%	94.06%	93.78%	93.50%	93.22%
8	Water - Residential - 1" - Tier 2	94.35%	94.06%	93.78%	93.50%	93.22%
9	Water - Residential - 1" - Tier 3	94.35%	94.06%	93.78%	93.50%	93.22%
10	Water - Residential - 1.5" - Tier 1	0.00%	0.00%	0.00%	0.00%	0.00%
11	Water - Residential - 1.5" - Tier 2	0.00%	0.00%	0.00%	0.00%	0.00%
12	Water - Residential - 1.5" - Tier 3	0.00%	0.00%	0.00%	0.00%	0.00%
13	Water - Residential - 2" - Tier 1	0.00%	0.00%	0.00%	0.00%	0.00%
14	Water - Residential - 2" - Tier 2	0.00%	0.00%	0.00%	0.00%	0.00%
15	Water - Residential - 2" - Tier 3	0.00%	0.00%	0.00%	0.00%	0.00%
16	Non-Residential - 5/8" - Tier 1	94.35%	94.06%	93.78%	93.50%	93.22%
17	Non-Residential - 5/8" - Tier 2	94.35%	94.06%	93.78%	93.50%	93.22%
18	Non-Residential - 3/4" - Tier 1	94.35%	94.06%	93.78%	93.50%	93.22%
19	Non-Residential - 3/4" - Tier 2	94.35%	94.06%	93.78%	93.50%	93.22%
20	Non-Residential - 1" - Tier 1	94.35%	94.06%	93.78%	93.50%	93.22%
21	Non-Residential - 1" - Tier 2	94.35%	94.06%	93.78%	93.50%	93.22%
22	Non-Residential - 1.5" - Tier 1	0.00%	0.00%	0.00%	0.00%	0.00%
23	Non-Residential - 1.5" - Tier 2	0.00%	0.00%	0.00%	0.00%	0.00%
24	Non-Residential - 2" - Tier 1	0.00%	0.00%	0.00%	0.00%	0.00%
25	Non-Residential - 2" - Tier 2	0.00%	0.00%	0.00%	0.00%	0.00%
26	Sprinkler - 5/8" - Tier 1	94.35%	94.06%	93.78%	93.50%	93.22%
27	Sprinkler - 5/8" - Tier 2	94.35%	94.06%	93.78%	93.50%	93.22%
28	Sprinkler - 3/4" - Tier 1	94.35%	94.06%	93.78%	93.50%	93.22%
29	Sprinkler - 3/4" - Tier 2	94.35%	94.06%	93.78%	93.50%	93.22%
30	Sprinkler - 1" - Tier 1	94.35%	94.06%	93.78%	93.50%	93.22%
31	Sprinkler - 1" - Tier 2	94.35%	94.06%	93.78%	93.50%	93.22%
32	Sprinkler - 1.5" - Tier 1	0.00%	0.00%	0.00%	0.00%	0.00%
33	Sprinkler - 1.5" - Tier 2	0.00%	0.00%	0.00%	0.00%	0.00%
34	Sprinkler - 2" - Tier 1	0.00%	0.00%	0.00%	0.00%	0.00%
35	Sprinkler - 2" - Tier 2	0.00%	0.00%	0.00%	0.00%	0.00%

The manufacturer's warranty based on repaired meter accuracy expires in year 15. Therefore the accuracies stated in Table 7.1 for year 16 through year 20 are stipulated values that estimate

repaired meter accuracy in those years. Since SIEMENS cannot be certain of degradation from year 16 onwards, consumption and revenue increases calculated for years 16 through 20 are therefore stipulated and measured using M&V Option E.

Table 7.2 – Contracted Baseline Utility Consumption for Non Water Meter FIMs

FIM	Electrical Consumption (kWh)	Electrical Demand (kW)
WWTP Aeration System	1,790,973	3,829
WWTP Digester Blowers	394,172	46.8

This Exhibit C is attached to and made a part of the Agreement between SIEMENS and the CLIENT. BY SIGNING BELOW, THE PARTIES CONFIRM THAT THEY HAVE REVIEWED THE INCLUDED MEASUREMENT AND VERIFICATION OPTIONS AND THEIR APPLICATION TO BE USED IN CALCULATING SAVINGS UNDER THE AGREEMENT.

CLIENT: City of Bellaire, Texas

Signature:
Printed Name: Andrew S. Friedberg
Title: Mayor
Date: August 29, 2016

SIEMENS: Siemens Industry, Inc.

Signature:
Printed Name: Peter Kamps
Title: Vice President Finance & Business Administration
Date:

NAME: David R. Mangano
TITLE: Sr. Vice President Field Operations
DATE: 9/1/16

Approved By Legal
Marc E. Bouchard

SIEMENS

Certificate of Substantial Completion

PROJECT NAME:	
CLIENT:	
CERTIFICATE DATE (mm/dd/yyyy):	
CERTIFICATE NUMBER:	
PROJECT NUMBER:	

The following portions of the Work are at Substantial Completion in accordance with the Agreement. (Insert unique Work item such as Facility Improvement Measure title, system name, building, etc.)

Work Item:	
Warranty Start Date (mm/dd/yyyy):	
Work Item:	
Warranty Start Date (mm/dd/yyyy):	
Work Item:	
Warranty Start Date (mm/dd/yyyy):	

The Building Technologies Division of Siemens Industry, Inc. guarantees the workmanship and materials of the above Substantially Complete Work in accordance with the Agreement.

The Work indicated above has been reviewed by the CLIENT and has been found, to the best of the CLIENT's knowledge, to be Substantially Complete. Substantial Completion is the milestone in the progress of the Work at which time the Work is sufficiently complete and available for the CLIENT to have beneficial use of the Work for its intended purpose. A list of items to be completed and corrected (if any) shall be identified as the Outstanding Items List, attached to this form, and indicated by checking the appropriate box below:

Outstanding Items List Attached: ☐ **No Outstanding Items Noted:** ☐

The failure of the CLIENT to note items requiring completion or correction does not relieve the contractual responsibility of Building Technologies Division of Siemens Industry, Inc. to complete or correct the Work. Work found to require completion or correction after the Certificate Date of this

Certificate, but within the warranty period shall be corrected in accordance with the Agreement's warranty provisions.

Building Technologies Division of Siemens Industry, Inc. agrees to complete or correct all items indicated on the Outstanding Items in a timely manner.

Building Technologies Division of Siemens Industry, Inc. Representative: _____

Signature: _____ Date: _____

The CLIENT accepts the Work indicated above as Substantially Complete and assumes possession and beneficial use of the Work on the Warranty Start Date indicated above.

CLIENT: _____

CLIENT Representative: _____

Signature: _____ Date: _____

Note: The CLIENT shall, upon execution of this Certificate of Substantial Completion, assume all contractual responsibilities for maintenance, insurance, operation, and protection of the Substantially Complete Work in accordance with the Agreement.

SIEMENS

Certificate of Final Completion

PROJECT NAME:	
CLIENT:	
CERTIFICATE DATE (mm/dd/yyyy):	
PROJECT NUMBER:	

All elements of the project Work have been reviewed by the CLIENT and have been found, to the best of the CLIENT's knowledge, to be at Final Completion. All items noted in the Outstanding Items Lists associated with Certificate(s) of Substantial Completion have been resolved, and all Work as defined in Exhibit A of the Agreement is complete.

The failure of the CLIENT to note items requiring completion or correction does not relieve the contractual responsibility of Building Technologies Division of Siemens Industry, Inc. to complete or correct the Work. Work found to require completion or correction after the date of this Certificate, but within the warranty period shall be promptly corrected in accordance with the Agreement's warranty provisions.

Building Technologies Division of Siemens Industry, Inc. has reviewed the project Work, as well as all contractual requirements, and the requirements for Final Completion have been met.

Building Technologies Division of Siemens Industry, Inc. Representative: _____

Signature: _____ Date: _____

The CLIENT accepts the project Work as meeting the requirements for Final Completion.

CLIENT: _____

CLIENT Representative: _____

Signature: _____ Date: _____