CONTRACT NO. 473-17-00002
BETWEEN
THE PUBLIC UTILITY COMMISSION OF TEXAS AND
TETRA TECH MA, INC.

The parties to this contract are the Public Utility Commission of Texas, an agency of the state of Texas with its office located at 1701 N. Congress Ave., Austin, Texas 78701 and TETRA TECH MA, Inc, a Delaware corporation, located at 700 N. St. Mary's Street, Suite 300, San Antonio, Texas 78205.

Article 1. DEFINITIONS

When used in this Contract, the following terms shall have the following meanings:

1.1 "Public Utility Commission," "PUCT," or "Commission" means the Public Utility Commission of Texas acting through its Executive Director and the agency's designated Contract Administrator.

1.2"Contractor" includes **Tetra Tech MA, Inc. ("Tetra Tech")**, and any successors, heirs, and assigns.

1.3 "Services" means any and all services performed and any and all goods and products delivered by Contractor as specified in Attachment A, Statement of Work (SOW), Attachment B, Budget and Billing, and Attachment C, Gantt Chart of Deadlines.

Article 2. COMPENSATION

2.1 Compensation. Contractor agrees to provide all Services (including labor, expenses, and any other services) described in Attachment A, SOW, at the rates set forth in Attachment B, with a price not to exceed $7,190,586. Contractor understands that the PUCT is not responsible for payment of any costs or expenses exceeding this amount.

If Contractor believes that changes in the scope of Services to be performed will require Contractor to increase its fee, it must request the PUCT's written authorization to increase its fee. The Contractor must document the changes in the scope of Services and why they will require additional effort. The PUCT must approve the increase in fee by written amendment to this Contract before the Contractor performs any Services or may invoice the increased fee.

2.2 Payment Process. Contractor shall submit a statement for services or invoice to the PUCT Contract Administrator no later than the 15th day of the month after the month that the Services were performed. The invoice must contain the name of the person performing Services and a brief description of work performed. No payment will be made for administrative overhead, overtime, etc.

On the statement or invoice, Contractor must include a statement that the invoice accurately describes the Services performed and the Services were performed in compliance with the Contract. The statement or invoice must include the vendor identification number issued by the Texas Comptroller or Contractor's federal taxpayer identification number, a description of the Services provided, and the name and division of the PUCT Contract Administrator.

Contractor shall submit the statement or invoice to the PUCT as follows:

By email to: Payables@puc.texas.gov

Or by mail to: Accounts Payable
Public Utility Commission of Texas
P.O. Box 13326
Austin, TX 78711-3326

2.3 Payment for Services. Contractor's acceptance of payment releases the PUCT of all claims for compensation owed in connection with this Contract.

2.4 Payments made to Subcontractors. Contractor shall pay any subcontractor hereunder the appropriate share of payments received not later than the 10th day after the date Contractor receives the payment. The subcontractor's payment shall be overdue on the 11th day after the date Contractor receives the payment. The PUCT must approve Contractor's use of any subcontractor before Contractor engages the subcontractor (see Sec. 5.1).

2.5 Records. Contractor and its subcontractors, if any, shall maintain records and books of account relating to Services provided under this Contract. Contractor shall, for a period of seven (7) years following the expiration or termination of this Contract, maintain its records (electronic and paper) of the work performed under this Contract. Records include, but are not limited to correspondence concerning the subject of this Contract between Contractor and the PUCT; Contractor's internal correspondence; and correspondence between Contractor and any third party. Contractor shall make all records that support the performance of Services and payment available to PUCT and/or its designees or the State Auditor during normal business hours with reasonable notice, upon the request of the PUCT Contract Administrator.

2.6 Sole Compensation. Payments under this Article are Contractor's sole compensation under this Contract. Contractor shall not incur expenses with the expectation that the PUCT or any other agency of the state of Texas will directly pay the expense to a third-party vendor irrespective of the reason for incurring those expenses.

Article 3. CONTRACT ADMINISTRATION

3.1 PUCT Contract Administration. The PUCT designates **Katie Rich** to serve as its primary point of contact and Contract Administrator throughout the term of this Contract. Contractor acknowledges that the PUCT Contract Administrator does not have any authority to amend this Contract on behalf of the PUCT, except as expressly provided herein. Contractor further acknowledges that such authority is exclusively held by the Commission or its authorized designee, Executive Director Brian H. Lloyd.

3.2 Contractor Contract Administration. Contractor designates its Contract Administrator as follows: Lark Lee

3.3 Reporting. Contractor shall report directly to the PUCT Contract Administrator and shall perform all activities in accordance with reasonable instructions, directions, requests, rules, and regulations issued during the term of this Contract as conveyed to Contractor by the PUCT Contract Administrator.

3.4 Cooperation. The Parties' Contract Administrators shall handle all communications between them in a timely and cooperative manner. The Parties shall timely notify each other by email or other written communication of any change in designee or contact information.

3.5 Inquiries and Prompt Referral. Contractor understands that the PUCT does not endorse any vendor, commodity, or service. Contractor, its employees, representatives, other agents, or

subcontractors may not issue any media release, advertisement, publication, or public pronouncement which pertains to this Contract or the Services or project to which this Contract relates or which mentions the PUCT without the prior approval of the PUCT. Contractor will promptly refer all inquiries regarding this Contract received from state legislators, other public officials, the media, or non-Parties to the PUCT Contract Administrator.

Article 4. REPORTS AND RECORDS

4.1 Written Reports. Contractor will provide written reports to the PUCT in the form and with the frequency specified in Attachment A, SOW, and Attachment C, Gantt Chart of Deadlines, or as otherwise agreed in writing between the Parties.

4.2 Distribution of Consultant Reports. PUCT shall have the right to distribute any consultant report associated with this contract, or to allow another Texas state agency or the Texas legislature to distribute it. PUCT shall also have the right to post any consultant report associated with this contract to the PUCT's website or to the website of a standing committee of the legislature. This provision does not waive any right to confidentiality that PUCT may assert for the report or any portion thereof.

Article 5. SUBCONTRACTING PARTIES

5.1 Use of Subcontractors. The Parties acknowledge and agree that at the time of execution of this Contract, Contractor intends to perform the Services required under this Contract using the following subcontractor: Texas Energy Engineering Services, Inc. (TEESI). Contractor will notify the PUCT Contract Administrator of any other proposed subcontract and will work with the PUCT HUB Coordinator to procure such other subcontractor and to submit appropriate subcontractor selection documentation for approval prior to engaging any other subcontractor, such approval not to be unreasonably withheld. Any such other subcontract or subsequent substitution of a subcontractor must be approved according to the terms of Article 7.

5.2 Sole Responsibility. Contractor is solely responsible for the quality and timeliness of the work produced by all subcontractors that Contractor may engage to provide Services hereunder and for the timely payment for all such work produced by all subcontractors that the PUCT accepts and pays for in accordance with the terms of this Contract.

5.3 Prime Vendor Contract. The Parties expressly agree that this Contract is intended to constitute a prime vendor contract, with Contractor serving as the prime vendor for delivery of the Services made the subject hereof. Contractor acknowledges and agrees that it is fully liable and responsible for timely, complete delivery of the Services described in this Contract, notwithstanding the engagement of any subcontractor to perform an obligation under this Contract.

Article 6. TERM, SUSPENSION, AND TERMINATION

6.1 Term. The term of this Contract shall begin on January 1, 2017 or the date signed by the last party to sign, the latter of the two and shall continue in effect until December 31, 2021 unless sooner terminated under Sections 6.3 and 6.4 of this Contract.

6.2 Termination for Cause by the PUCT. If Contractor is in default of any material term of this Contract, the PUCT may serve upon Contractor written notice requiring Contractor to cure such default. Unless within thirty (30) days after receipt of said notice by Contractor, said default is corrected or arrangements satisfactory to the PUCT, as applicable, for correcting the default

have been made by Contractor, the PUCT may terminate this Contract for default and shall have all rights and remedies provided by law and under this Contract. If PUCT terminates Contractor under Article 18.12, PUCT need not provide any notice or opportunity for curing the default.

6.3 Termination for the Convenience of the PUCT. The PUCT may, upon thirty (30) days written notice to Contractor, terminate this Contract whenever the interests of the PUCT so require. The PUCT will only reimburse those expenses already incurred at the time the notice is provided. The PUCT shall not be liable for any damages and/or loss to Contractor as a result of termination for convenience.

6.4 Transfer of Duties. In the event of termination, Contractor will provide reasonable cooperation to transfer its duties under the Contract to another entity without disruption to the provision of Services.

6.5 Remedies for Breach. All remedies available to PUCT for breach or anticipatory breach of this Contract by Contractor are cumulative and may be exercised concurrently or separately, and the exercise of any one remedy shall not be deemed an election of such remedy to the exclusion of other remedies. Actual damages, cost projections, injunction relief, and/or performance bonds may also be invoked either separately or combined with any other remedy in accordance with applicable law.

6.6 Survival. In the event that this Contract expires or is terminated pursuant to its terms, the rights and obligations of the Parties under it shall end; provided that the provisions of Sections 2.5, 2.6, 3.5, 4.2, 6.4, 6.5, 7.5, 9.2, 9.4 through 9.6, 17.2 and 19.1 through 19.4, 19.9 and Articles 1, 10, 12, 14, 15, 16, 20, 21, 23, 28 and 29 shall survive in their entirety.

Article 7. ASSIGNMENT, AMENDMENTS, AND MODIFICATIONS

7.1 Material Change Requests. PUCT may propose changes to Attachment A, SOW and/or Attachment C, Gantt Chart of Deadlines. Upon receipt of a written request from the PUCT for a change to Attachment A, SOW, and/or Attachment C, Gantt Chart of Deadlines, Contractor shall, within a reasonable time thereafter, submit to the PUCT a detailed written estimate of any proposed price and schedule adjustment(s) to this Contract. No changes to Attachment A, SOW, or Attachment C, Gantt Chart of Deadlines, will occur without the Parties' written consent as provided in accordance with the terms stated in this Contract.

7.2 Changes in Law, Rules, or Rulings. Subsequent changes in federal or state legislation, rules and regulations or rulings by the PUCT may require modification of the terms of this Contract, including an increase or decrease in Contractor's duties or compensation. In the event of such subsequent changes to statutes, rules, and/or regulations, the PUCT and Contractor shall negotiate the terms of a contract modification in good faith and incorporate such modification into this Contract by written amendment.

7.3 No Assignment of Duties. This Contract shall be binding upon and inure to the benefit of the permitted successors and assigns of any Party (including by merger of Contractor or otherwise by operation of law); provided however that Contractor shall not otherwise, without the prior written consent of the PUCT, assign or transfer this Contract or any obligation incurred under this Contract. Any attempt by Contractor to assign or transfer this Contract or any obligation incurred under this Contract, in contravention of this paragraph, shall be void and of no force and effect.

7.4 Amendments and Modifications. This Contract may not be amended or modified in any

manner except by written instrument executed by authorized representatives of the Parties in accordance with the terms of this Contract.

7.5 Binding on Successors. The terms of this Contract shall be binding on any successor organization of any of the Parties.

Article 8. REPRESENTATIONS, WARRANTIES AND COVENANTS

8.1 Warranty of Performance. Contractor represents, warrants, and covenants that it will perform the Services outlined in Attachment A, SOW, in a professional and workmanlike manner, consistent with professional standards of practice in the professional industry.

8.2 Warranty of Services. Contractor warrants that the Services shall be rendered by the qualified personnel named in Section 19.8 of this Contract. If Services provided under this Contract require a professional license, then Contractor represents, warrants, and covenants that the activity will be performed only by duly licensed personnel.

Article 9. RISK OF LOSS AND PROPERTY RIGHTS

9.1 Risk of Loss. The risk of loss for all items to be furnished hereunder shall remain with Contractor until the items are delivered to and accepted by the PUCT, at which time the risk of loss shall pass to the PUCT.

9.2 Ownership. Except for materials where any intellectual property rights are vested in a third party, such as software or hardware, in which case such rights shall remain the property of the third party, all finished materials, conceptions, or products created and/or prepared for on behalf of the PUCT and purchased by the PUCT, or on behalf of the PUCT, that the PUCT has accepted as part of the performance of Services hereunder, shall be the PUCT's property exclusively and will be given to the PUCT either at the PUCT's request during the term of the Contract or upon termination or expiration of the Contract. Any proprietary modeling will remain the Contractor's, and the PUCT will receive relevant output results and assumptions. Notwithstanding the foregoing, materials created, prepared for, or purchased exclusively by the PUCT or on behalf of the PUCT are the PUCT's exclusive property regardless of whether delivery to the PUCT is effectuated during or upon termination or expiration of this Contract.

9.3 Licensed Software. With PUCT's advanced written consent, contractor may obtain software licenses as an agent of the PUCT for software that is used by Contractor solely for the purpose of providing Services under this Contract. Contractor shall provide the PUCT with a copy of any software license obtained by Contractor as an agent for the PUCT for the purpose of providing Services under this Contract.

9.4 Prior Works. Except as provided herein, all previously owned materials, conceptions, or products shall remain the property of Contractor and nothing contained in this Contract will be construed to require Contractor to transfer ownership of such materials to the PUCT.

9.5 Trademarks. The Parties agree that no rights to any trademark or service mark belonging to another Party or to any non-Party are granted to any other Party by this Contract, unless by separate written instrument. The PUCT acknowledges and agrees that use of any trademark associated with any software provided by Contractor under this Contract does not give the PUCT any rights of ownership in the trademark or the software.

9.6 Program Information. Program information, data, and details relating to Contractor's Services under this Contract shall be maintained separately from Contractor's other activities.

Contractor shall undertake all reasonable care and precaution in the handling and storing of this information.

9.7 Provision to be Inserted in Subcontracts. Contractor shall insert an article containing paragraphs 9.2 and 9.6 of this Contract in all subcontracts hereunder except altered as necessary for proper identification of the contracting Parties and the PUCT under this Contract.

Article 10. PUBLIC INFORMATION

10.1 Texas Public Information Act. (Texas Government Code Chapter 552). The Parties acknowledge that notwithstanding any other provisions of this Contract, the Texas Public Information Act ("PIA") governs the treatment of all information held by or under the control of the Commission. The Commission will notify Contractor of requests for Contractor's information as provided under the PIA.

10.2 Agreement Not Confidential. The Parties acknowledge that not all terms of this Contract may be confidential pursuant to the Texas Public Information Act, regardless of whether those terms are marked "Proprietary," "Trade Secret," or "Confidential." Contractor further acknowledges that in the event of a dispute over the release of a proposal or part of a proposal the PUCT is bound by the decision made by the Office of the Attorney General of Texas.

10.3 Contractor's Duty to Provide Public Information. Contractor is required, at no additional cost to the state, to make available in a format that is accessible by the public any information created or exchanged with the state pursuant to this contract. For the purpose of Section 10.3 of this contract, paper documents, Adobe Portable Document Format files (.pdf), Microsoft Excel spreadsheets (.xls), Microsoft Word documents (.docx), and Hypertext Markup Language (.html) files shall be considered "accessible by the public," unless another format is specified by the PUCT, at the PUCT's sole discretion. If information created or exchanged with the state pursuant to this contract is excepted from disclosure under the Texas Public Information Act, Contractor will not be required to make the information available to the public, but may be required to facilitate the PUCT's provision of the information to the Texas Attorney General for a decision on the information's confidentiality. The PUCT has no duty or responsibility to argue a defense of confidentiality to Contractor's information or data; it shall be Contractor's sole responsibility to do so.

Article 11. CONFLICTS OF INTEREST AND EMPLOYMENT RESTRICTION

11.1 No Conflicting Relationships. Contractor certifies to the Commission that no existing or contemplated relationship exists between Contractor and the Commission that interferes with fair competition or is a conflict of interest, and that no existing or contemplated relationship exists between Contractor and another person or organization, whether or not located within the State of Texas, that constitutes or will constitute a conflict of interest for Contractor with respect to the Commission.

11.2 Prohibition on Transactions with Parties Adverse to Commission. Contractor agrees that during the term of this Contract and any extensions or renewals thereof, it will neither provide contractual services nor enter into any agreement, oral or written, to provide services to a person or organization that is regulated or funded by the Commission or that has interests that are directly or indirectly adverse to those of the Commission. The Commission may waive this provision in writing if, in the Commission's sole judgment, such activities of the Contractor will not be adverse to the interests of the Commission.

11.3 Notice of Conflict. Contractor agrees to promptly notify the PUCT of any circumstance that may create a real or perceived conflict of interest, whether arising prior to or during the term of the contract. Contractor agrees to use its best efforts to resolve any real or perceived conflict of interest to the satisfaction of the PUCT. Contractor's failure to do so shall be grounds for termination of this contract for cause, pursuant to Section 6.3.

Article 12. INDEMNIFICATION

Contractor shall indemnify, defend and hold harmless the PUCT, the State of Texas, and its officers, agents, employees, representatives, contractors, assignees, and designees from any and all liabilities, claims, suits, assessments, penalties, losses, damages, demands or causes of action, and all related costs, attorney fees and expenses of whatever kind or nature asserted by a third party and occurring in any way incident to, arising out of, or in connection with acts or omissions of Contractor, its agents, employees and subcontractors, committed in the conduct of this Contract. Contractor shall have the obligation to undertake the defense of any such claim, process, or legal proceeding at Contractor's expense; provided, however, that the PUCT may participate in the defense with counsel of its own choosing. Any defense shall be coordinated by contractor with the Office of the Attorney General when Texas State Agencies are named defendants in any lawsuit. Contractor may not agree to any settlement without first obtaining the concurrence from the Office of the Attorney General. Contractor and the PUCT agree to furnish timely written notice to each other of any such claim.

If all or any part of the Deliverables is the subject of any claim, suit, or proceeding for infringement or misappropriation of any Intellectual Property Right, Contractor may, and in the event of any adjudication that the Deliverables or any part thereof infringes or misappropriates any patent, trademark, copyright, or trade secret, or if the licensing or use of any of the Deliverables or any part thereof is enjoined, Contractor shall, at its expense do one of the following things: (i) procure for PUCT the right under such patent, trademark, copyright or trade secret to fully use the Deliverables or the affected part thereof; or (ii) replace the Deliverable or affected part thereof with another non-infringing Deliverable; or (iii) suitably modify the Deliverable or affected part thereof to make it non-infringing.

Article 13. INSURANCE

Contractor agrees to comply with all state and federal laws applicable to the liability and payment of Contractor and Contractor's employees, including laws regarding wages, taxes, insurances, and workers' compensation. Neither the PUCT nor the State of Texas shall be liable to the Contractor, its employees, agents, or others for the provision of unemployment insurance and/or workers' compensation or any benefit available to a state employee.

13.1 Minimum Insurance. Contractor shall, at its sole cost and expense, secure and maintain as a minimum, from the Effective Date and thereafter during the term of this Contract and any renewals or extensions thereof, for its own protection and the protection of the PUCT and the State of Texas:

(a) commercial liability insurance, covering, at a minimum, the following categories of liability within the following limits: (i) bodily injury and property damage - $1,000,000 limit per occurrence, $2,000,000 aggregate, (ii) medical expense - $5,000 limit per person, (iii) personal injury and advertising liability - $1,000,000 limit, (iv) products/completed operations – $2,000,000 aggregate, (v) damage to premises rented - $50,000 limit;

(b) automobile liability coverage for vehicles driven by Contractor's employees ($500,000 per

occurrence); and

(c) workers' compensation insurance in accordance with the statutory limits, as follows: (i) employer's liability - $1,000,000 each incident, (ii) disease - $1,000,000 each employee and $1,000,000 policy limit.

The PUCT and the State of Texas shall be named an additional insured on the commercial liability and automobile policies.

Insurance coverage shall be from companies licensed by the State of Texas to provide insurance with an "A" rating from A.M. Best and authorized to provide the corresponding coverage.

13.2 Certificates of Insurance. Contractor shall furnish to the PUCT certificates of insurance and any applicable endorsements, signed by authorized representatives of the surety or insurers, of all such bonds and insurance and confirming the amounts of such coverage within ten (10) days of the Effective Date of this Contract, and upon request thereafter. Contractor shall provide the PUCT Contract Administrator with timely renewal certificates as the coverage renews. Failure to maintain such insurance coverage specified herein, or to provide such certificates or endorsements within ten (10) days of expiration, shall constitute a material breach of this Contract. Contractor shall provide thirty (30) days written notice of any notice for renewal and/or cancellation of insurance.

Article 14. DISPUTE RESOLUTION

The Parties agree to resolve disputes arising under this Contract through the dispute resolution process provided for in Chapter 2260 of the Texas Government Code and Subchapter C of the PUCT Rules for Administrative Services.

Article 15. SOVEREIGN IMMUNITY

The State of Texas and the PUCT do not waive sovereign immunity by entering into this Contract and specifically retain immunity and all defenses available to them under the Constitution, the laws of the State of Texas, or the common law.

Article 16. GOVERNING LAW

Notwithstanding anything to the contrary in this Contract, this Contract shall be deemed entered into in the State of Texas and shall be governed by, construed and interpreted in accordance with the laws of the State of Texas that apply to contracts executed in and performed entirely within the State of Texas, without reference to any rules of conflict of laws. The Parties consent to the exclusive jurisdiction of the State of Texas. The Parties hereby submit to the jurisdiction of the courts located in, and venue is hereby stipulated to, the state courts located in Travis County, Texas. Each Party stipulates that it is subject to the jurisdiction of the courts located in Travis County, Texas, for any cause of action arising from any act or omission in the performance of this Contract.Further, each Party hereby waives any right to assert any defense to jurisdiction being held by the courts located in Travis County, Texas, for any cause of action arising from any act or omission in the performance of this Contract.

Article 17. COMPLIANCE WITH LAW

17.1 General. Contractor shall comply with all federal, state, and local laws, executive orders, regulations, and rules applicable at the time of performance. Contractor warrants that all Services sold hereunder shall have been produced, sold, delivered, and furnished in strict compliance with

all applicable laws and regulations to which they are subject, including, but not limited to, Equal Employment Opportunity laws. All laws and regulations required in agreements of this character are hereby incorporated by this reference.

17.2 Taxes. Contractor agrees to comply with any and all applicable state tax laws that may require any filing with and/or payment to the State of Texas as a result of any action taken as a result of this Contract.

17.3 Workers' Compensation. Contractor agrees that it shall be in compliance with applicable state workers' compensation laws throughout the term of this Contract and any renewals or extensions thereof.

17.4 Conflicts. Contractor agrees to abide by the requirements of and policy directions provided by the Texas statutes and the rules and regulations of the PUCT, and will inform and consult with the PUCT when further interpretations or directions are needed in order to fully implement the rules and regulations of the Commission. In the event that Contractor becomes aware of inconsistencies between this Contract and a Texas statute or PUCT rule, Contractor will so advise the PUCT immediately and will cooperate fully to revise applicable provisions of this Contract as necessary.

17.5 Compliance with Deceptive Trade Practices Act. Contractor shall comply with Texas Business and Commerce Code Chapter 17.

17.6 Compliance with Americans with Disabilities Act. Contractor shall Comply with the Americans with Disabilities Act, 42 U.S.C. Chapter 126.

17.7 Prohibited Use of Appropriated/Other Funds. Contractor shall comply with Texas Government Code Sections 556.005 and 556.0055 related to prohibited uses of appropriated and other funds.

17.8 Certificate of Interested Parties Form. At the time Contractor submits a signed contract to the PUCT, Contractor shall submit a "Certificate of Interested Parties" form to the PUCT and file the form with the Texas Ethics Commission. The form and instructions for filing the form can be found at: https://www.ethics.state.tx.us/tec/1295-Info.htm. Contractor shall not perform any work under the contract, nor receive any compensation prior to filing the form with the Texas Ethics Commission.

Article 18. CONTRACTOR'S CERTIFICATION

By accepting the terms of this Contract, Contractor certifies that, to the extent applicable, it is in compliance with the following requirements and prohibitions. Contractor understands and agrees that a false certification may lead to termination of this Contract for cause.

18.1 Prohibitions on Gifts. Contractor has not given, offered to give, nor intends to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant in connection with this Contract.

18.2 Delinquent Obligations. Contractor is not currently delinquent in the payment of any franchise or sales tax owed to the State of Texas, and is not delinquent in the payment of any child support obligations under applicable state law.

18.3 Terrorist Financing. The PUCT is federally mandated to adhere to the directions provided in the President's Executive Order (EO) 13224, Executive Order on Terrorist Financing –

Blocking Property and Prohibiting Transactions With Persons Who Commit, Threaten to Commit, or Support Terrorism, effective 9/24/2001 and any subsequent changes made to it, via cross referencing proposers/vendors with the Federal General Services Administration's System for Award Management (SAM), https://www.sam.gov/, which is inclusive of the United States Treasury's Office of Foreign Assets Control (OFAC) Specially Designated National (SDN) list.

http://www.treasury.gov/resource-center/sanctions/SDN-List/Pages/default.aspx

Contractor certifies that the Contractor and its principals are eligible to participate in this transaction and have not been subjected to suspension, debarment, or similar ineligibility determined by any federal, state or local governmental entity and that Contractor is not listed on the federal government's terrorism watch list as described in Executive Order 13224. Entities ineligible for federal procurement are listed at: https://www.sam.gov/

18.4 Antitrust. Neither Contractor nor anyone acting for Contractor has violated the antitrust laws of this State, codified in Section 15.01, et seq. of the Texas Business and Commerce Code or the Federal Antitrust Laws, nor has communicated directly or indirectly to any competitor or any other person engaged in such line of business for the purpose of obtaining an unfair price advantage.

18.5 Family Code. Contractor has no principal who is ineligible to receive funds under Texas Family Code Section 231.006 and acknowledges that this Contract may be terminated and payment may be withheld if this certification is inaccurate.

18.6 Prohibited Compensation. Contractor has not received compensation from the PUCT, or any agent, employee, or person acting on the PUCT's behalf for participation in the preparation of this Contract.

18.7 Government Code. Under Texas Government Code Section 2155.004, Contractor certifies that the individual or business entity named in this contract is not ineligible to receive the specified contract and acknowledges that this contract may be terminated and/or payment withheld if this certification is inaccurate.

18.8 Outstanding Obligations. Payments due under the contract will be applied towards any debt that is owed to the State of Texas, including but not limited to delinquent taxes and child support.

18.9 Contracting with Executive Head of State Agency. Contractor certifies this Contract is in compliance with Texas Government Code Section 669.003 relating to contracting with the executive head of a State agency. If Texas Government Code Section 669.003 applies, bidder will provide the following information in order for the bid to be evaluated: Name of Former Executive; Name of State Agency; Date of Separation from State Agency; Position with Bidder; and Date of Employment with Bidder.

18.10 Buy Texas. Contractor will comply with Texas Government Code Section 2155.4441, pertaining to service contracts regarding the use of products produced in the State of Texas.

18.11 Hurricane Recovery. Under Texas Government Code Section 2155.006, Contractor certifies that the individual or business entity named in this proposal is not ineligible to receive the specified contract and acknowledges that this contract may be terminated and payment withheld if this certification is inaccurate.

18.12 E-Verify. Contractor certifies and ensures that it utilizes and will continue to utilize, for

the term of this Contract, the U.S. Department of Homeland Security's E-Verify system to determine the eligibility of:

1. All persons hired to perform duties within Texas, during the term of the Contract; and
2. All persons (including subcontractors) hired by the proposer to perform work pursuant to the Contract, within the United States of America.

The Contractor shall provide, upon request of PUCT, an electronic or hardcopy screenshot of the confirmation or tentative non-confirmation screen containing the E-Verify case verification number for attachment to the Form I-9 for the three most recent hires that match the criteria above, by the Contractor, and Contractor's subcontractors, as proof that this provision is being followed.

If this certification is falsely made, the Contract may be immediately terminated, at the discretion of the state and at no fault to the state, with no prior notification. The Contractor shall also be responsible for the costs of any re-solicitation that the state must undertake to replace the terminated Contract.

This term should not be construed to require Contractor to utilize E-Verify to determine the eligibility of existing employees, or otherwise use E-Verify in violation of the law.

18.13 Debarred Vendors List. Contractor certifies that it is not on the Debarred Vendors List located at http://www.window.state.tx.us/procurement/prog/vendor_performance/debarred/.

Article 19. GENERAL PROVISIONS

19.1 Relationship of Parties. Contractor is and shall remain at all times an independent contractor, and nothing in this Contract shall be deemed to create a joint venture, partnership, employment, franchise, master-servant, or agency relationship between the Parties. Except as expressly provided to the contrary elsewhere in this Contract, no Party has any right or authority to act on behalf of another Party, nor to assume or create any obligation, liability or responsibility on behalf of another Party. Under no circumstances shall the relationship of employer and employee be deemed to arise between the PUCT and Contractor's personnel. Contractor shall be solely responsible for achieving the results contemplated by this Contract, whether performed by Contractor, its agents, employees or subcontractors.

19.2 Non-Exclusivity. Nothing in this Contract is intended nor shall be construed as creating any exclusive arrangement between Contractor and PUCT. This Contract shall not restrict PUCT from acquiring similar, equal, or like goods and/or services from other entities or sources.

19.3 Taxes and Statutory Withholdings. Contractor acknowledges that it is not a PUCT employee, but is an independent contractor. Accordingly, it is Contractor's sole obligation to report as income all compensation received by Contractor under the terms of this Contract. Contractor is solely responsible for all taxes (federal, state, or local), withholdings, social security, unemployment, Medicare, Workers' Compensation insurance, and other similar statutory obligations (of any governmental entity of any country) arising from, relating to, or in connection with any payment made to Contractor under this contract. Contractor shall defend, indemnify and hold the PUCT harmless to the extent of any obligation imposed by law on the PUCT to pay any tax (federal, state, or local), withholding, social security, unemployment, Medicare, Workers' Compensation insurance, or other similar statutory obligation (of any governmental entity of any country) arising from, relating to, or in connection with any payment

made to Contractor under this Contract. Further, Contractor understands that neither it nor any of its individual employees is eligible for any PUCT employee benefit, including but not limited to holiday, vacation, sick pay, withholding taxes (federal, state, local), social security, Medicare, unemployment or disability insurance, Workers' Compensation, health and welfare benefits, profit sharing, 401(k) or any employee stock option or stock purchase plans. Contractor hereby waives any and all rights to any such PUCT employment benefit.

19.4 Notice. Except as otherwise stated in this Contract, all notices provided for in this Contract shall be (a) in writing, (b) addressed to a Party at the address set forth below (or as expressly designated by such Party in a subsequent effective written notice referring specifically to this Contract), (c) sent by FedEx, with proper postage affixed and (d) deemed effective upon the third business day after deposit of the notice in the U.S. Mail.

IF TO THE PUCT:

ATTENTION: Brian H. Lloyd, Executive Director
1701 N. Congress Ave., 7th Floor
Austin, TX 78701
With copies to the PUCT Contract Administrator, and Jay Stone, CTPM, CTCM, at the same address.

IF TO CONTRACTOR:

ATTENTION: Bonnie Brandreth, Vice President
6410 Enterprise Lane, Suite 300
Madison, WI 53719

19.5 Headings. Titles and headings of paragraphs and sections within this Contract are provided merely for convenience and shall not be used or relied upon in construing this Contract or the Parties' intentions with respect thereto.

19.6 Export Laws. Contractor represents, warrants, agrees and certifies that it (a) shall comply with the United States Foreign Corrupt Practices Act (regarding, among other things, payments to government officials) and all export laws and rules and regulations of the United States Department of Commerce or other United States or foreign agency or authority and (b) shall not knowingly permit any non-Party to directly or indirectly, import, export, re-export, or transship any intellectual property or any third Party materials accessed by Contractor during the course of this Contract in violation of any such laws, rules or regulations.

19.7 Preprinted Forms. The use of preprinted forms, such as purchase orders or acknowledgments, in connection with this Contract is for convenience only and all preprinted terms and conditions stated thereon are void and of no effect. The terms of this Contract cannot be amended, modified, or altered by any conflicting terms, provisions, or conditions contained in a proposal or a preprinted form, such as purchase orders or acknowledgements. If any conflict exists between this Contract and any terms and conditions on a proposal, purchase order, acknowledgment, or other preprinted form, the terms and conditions of this Contract will govern.

19.8 Specific Personnel. Contractor has identified the personnel for this assignment ("Team"), as follows: Lark Lee, Dan Belknap, Eric Rambo, Kim Baslock, Rich Hasselman, Mitch Bible (TEESI), and Kendra Scott.

Contractor warrants that it shall use its best efforts to avoid any changes to the Team during the

course of this Contract. Should personnel changes occur during the term of this Contract or any extensions or renewals thereof, Contractor will recommend to the PUCT personnel with comparable experience and required qualifications and training. The PUCT must approve any change in personnel on this project in writing. Contractor shall provide individuals qualified to perform the tasks assigned to such individual. At the PUCT's request, Contractor shall remove from the project any individual whom the PUCT finds unacceptable for any reason in the PUCT's sole discretion. Contractor shall replace such individual with another individual satisfactory to the PUCT as soon as practicable.

19.9 Publicity. Contractor understands and agrees that no public disclosures or news releases pertaining to this Contract or any results or findings based on information provided, created, or obtained to fulfill the requirements of this Contract shall be made without the prior written approval of the PUCT.

Article 20. NO IMPLIED WAIVER

The failure of any party, at any time, to enforce a provision of this contract will not constitute a waiver of that provision; will not affect the validity of this contract or any part of it; and will not affect the right of any party to enforce each and every provision.

Article 21. ORDER OF PRECEDENCE

In the event of conflicts or inconsistencies between the provisions of this contract and its attachment(s), the following are given preference in the order listed below:

1) The terms and conditions of this contract and the Billing Rates provided in Attachment B;
2) Attachment A, SOW, including any exhibits and Attachment C, Gantt Chart of Deadlines;
3) Contractor's proposal, as modified by their Best and Final Offer (BAFO).

Article 22. FORCE MAJEURE

Neither the PUCT nor Contractor will be considered in default in the performance of its obligations under this contract to the extent that the performance of such obligations is prevented or delayed by any cause beyond the reasonable control of the affected party, which such party could not, by due diligence have avoided, including but not limited to acts of God, severe weather, explosions, riots, acts of war, or orders of legal authority. Such causes will not relieve either party of liability in the event of its failure to use due diligence to remedy the situation and remove the cause in an adequate manner, with all reasonable dispatch, and to give notice and full particulars of the same in writing to the other party as soon as possible after the occurrence of the cause that prevented or delayed performance of the obligations. If the event of Force Majeure continues for a period of more than one hundred and eighty (180) days, either party thereafter may terminate this contract upon giving at least ten (10) days prior written notice to the other party.

Article 23. SEVERABILITY

If any provision of this contract is held unlawful or otherwise unenforceable, such provision will be severed and deemed deleted and the remainder of this contract will continue in full force and

effect, as if such provision had never existed.

Article 24. FUNDING OUT CLAUSE
This contract is contingent upon the continued availability of funding. If funds become unavailable through lack of appropriations, legislative or executive budget cuts, amendment of the Appropriations Act, state agency consolidations, or any other disruptions of current appropriations, provisions of the Termination Article shall apply. Any contract resulting from this solicitation is contingent upon the continued availability of lawful appropriations by the Texas Legislature. *See* Texas Constitution, Article III Section 49, State Debts; and Texas General Appropriations Act for the 2014-2015 Biennium, Article IX, Section 6.03, Excess Obligations Prohibited.

Article 25. DRUG FREE WORKPLACE POLICY
The contractor shall comply with the applicable provisions of the Drug-Free Work Place Act of 1988, 41 U.S.C. § 8102, et seq., and 48 CFR § 52.223-6 Drug-Free Workplace) and maintain a drug-free work environment. The requirements of the Drug Free Workplace Act and the rules interpreting it are incorporated by reference and the contractor shall comply with the relevant provisions thereof, including any amendments that may hereafter be issued.

Article 26. SUBSTITUTIONS
Substitutions are not permitted without written approval of the PUCT.

Article 27. RIGHT TO AUDIT
Pursuant to Section 2262.003 of the Texas Government Code, the State Auditor may conduct an audit or investigation of Contractor or any other entity or person receiving funds from the state directly under this Contract or indirectly through a subcontract under this contract. The acceptance of funds by Contractor or any other entity or person directly under this contract or indirectly through a subcontract under this contract acts as acceptance of the authority of the state auditor, under the direction of the legislative audit committee, to conduct an audit or investigation in connection with those funds. Under the direction of the legislative audit committee, Contractor or any other entity that is the subject of an audit or investigation by the state auditor must provide the state auditor with access to any information the state auditor considers relevant to the investigation or audit. Contractor will ensure that this clause concerning the authority to audit funds received indirectly by subcontractors through the vendor and the requirement to cooperate is included in any subcontract awards.

Article 28. LIMITATION OF LIABILITY. Contractor shall not be liable to the PUCT or its officers and employees for any damages in excess of the amount of professional fees paid to Contractor under this Agreement. In no event shall Contractor be liable to the PUCT or any of its officers or employees for any incidental, consequential, indirect, special, or exemplary damages, including, but not limited to, loss of profits, revenue, data, business, or goodwill even if Contractor has been advised of the possibility of such damages.

Article 29. ENTIRE AGREEMENT
This contract, including: Attachment A, SOW; Attachment B, Budget and Billing; and

Attachment C, Gantt Chart of Deadlines; constitutes the entire agreement and understanding between the parties with regard to its subject matter and supersedes and merges all prior discussions, writings, negotiations, understandings, and agreements concerning the provision of these Services. Any terms and conditions attached to a solicitation will not be considered unless incorporated into this Contract by specific reference.

In WITNESS WHEREOF both parties by their duly authorized representatives have executed this contract effective as of the date of last signature.

The Public Utility Commission of Texas

By: _____

Brian H. Lloyd
Executive Director

Date Signed: 1/3/17

Contractor

By: _____

Bonnie Brandreth
Vice President

Date Signed: January 5, 2017

ATTACHMENT A
STATEMENT OF WORK

I. Overview

The purpose of this Contract is to comply with Texas Government Code Section 2254.029.

The Contractor will assist the PUCT by:

- Documenting the gross and net energy and demand impacts of utilities' individual energy efficiency and load management portfolios
- Determining cost-effectiveness of energy efficiency programs and portfolios
- Preparing and maintaining a Technical Reference Manual (TRM)
- Providing feedback for the PUCT, utilities, and other stakeholders on program portfolio performance
- Providing input into the utilities' and ERCOT's planning activities

Utilities will conduct their own activities to determine projected and claimed savings values – with the EM&V Contractor providing evaluated savings based on due-diligence reviews, audits, verifications, and/or independent analyses. The EM&V Contractor will operate under the PUCT's supervision and oversight and will offer independent analysis to the PUCT in order to assist the agency in making decisions in the public interest.

Should there be a conflict between this Statement of Work and any provision of 16 Tex. Admin. Code 25.181, the rule will prevail.

II. EM&V Objectives

1) Documenting the impacts of the utilities' individual energy efficiency and load management portfolios in Program Years 2016 through 2019, comparing their program year performance with established goals, and determining cost-effectiveness on a program by program and portfolio basis;
2) Providing feedback for the utilities, PUCT, and stakeholders on Program Years 2016 through 2019 program portfolio performance; and
3) Providing input into the utilities' and ERCOT's planning activities.

III. Guiding Principles

An EM&V Contractor shall:

1) Follow ethical guidelines documented in the American Evaluation Association's Guiding Principles for Evaluators, which call for: systematic inquiry, competence, integrity and honesty, respect for people, and responsibility for general and public welfare.
2) Use transparent methods to estimate savings and anticipate that impacts will be reviewed in public stakeholder forums to increase quality and reliability.
3) Review all important and relevant assumptions used by program planners and administrators.
4) Document all evaluation assumptions and calculations prepared by the EM&V Contractor and identify the reliability of results and threats to certainty in evaluation reports.
5) Focus the majority of evaluation expenditures and efforts in areas of greatest importance with respect to future efficiency portfolios or uncertainty associated with program savings.
6) Aggregate data in such a way as to protect customer proprietary information in any non-

confidential reports or filings the EM&V Contractor prepares.

7) Utilize data provided or received under PUCT authority only for purposes authorized by this Statement of Work and Subst. R. §25.181.
8) Maintain confidentiality of any information it receives related to the work performed unless directed to release the information by the PUCT.

IV. Impact Evaluations

1) Contractor shall prepare impact evaluations annually for the 2016-2019 program years to determine the following metrics for each utility's individual evaluated programs and for each utility's portfolio of programs:
    a) Gross energy and demand savings documented to have been achieved in the year being evaluated and gross lifetime energy (and demand) savings.
    b) Net energy and demand savings documented to have been achieved in the year being evaluated and net lifetime energy (and demand) savings, with consideration of all relevant factors.
    c) Program administrator cost test.[1]
    d) Other metrics related to program performance.
2) The impact evaluation activities may include the use of one or more approaches including: deemed savings, deemed savings calculations, measurement and verification, or large-scale data analysis with or without the use of control/comparison groups. Evaluations are encouraged to leverage secondary research as appropriate, with modifications as deemed necessary by the EM&V Contractor and as approved by PUCT staff. Evaluation activities will consist of verification activities on a census or sample of projects implemented by the utilities, or may include additional activities at the Contractor's discretion. Evaluations should, to the maximum extent possible, also rely on due-diligence of utility-provided documentation of savings and cost-effectiveness, versus the EM&V Contractor preparing its own original work, when such utility-provided documentation is shown to be adequately, as judged by the EM&V Contractor, reliable.
3) When net savings are calculated independently from gross savings, net savings may be calculated with one or more of the following approaches:
    i) Self-reporting surveys in which information is reported by participants, non-participants, and upstream market actors (including contractors, retailers, and manufacturers) without external verification or review;
    ii) Enhanced self-reporting surveys in which self-reporting surveys are combined with interviews and documentation review and analysis;
    iii) Statistical models that compare participants' and non-participants' energy and demand patterns;
    iv) Customer adoption models applied to specific markets; and
    v) Net-to-gross ratios (ratios that are multiplied by the gross savings to obtain an estimate of net savings) that are based on historic studies of similar programs.

V. Evaluation Schedule

The evaluation schedule shall support the above evaluation objectives and be aligned with the

[1] Data on incentives paid, administrative costs, and avoided energy and capacity costs are required to determine program administrator test values. These data will be provided by utilities and the EM&V contractor will only be required to provide limited checks for reasonableness of the data.

portfolio implementation schedules of the utilities as well as the requirements for regulatory decisions, including those associated with the energy efficiency cost recovery factors (EECRFs). Starting as soon as possible and according to a schedule approved by PUCT staff, the EM&V Contractor will prepare the TRM, Portfolio EM&V Plans, and any needed Evaluation Activity-Specific Detailed Research Plans and Site-Specific M&V Plans, Annual Portfolio Evaluation Reports, and publicly available status reports, indicating the status of its activities and any interim results and/or recommendations. PUCT staff will establish the schedule for such status plans and reports.

The annual final report for each program year will be expected to be completed and presented at an Energy Efficiency Implementation Project (EEIP) meeting by October of the year following the program year.

VI. Tasks

A general description of the tasks required of the contractor are listed below in this section. The tasks defined are at a fairly high level of generalization. A final work plan and tasks will be prepared as part of Task 1.

Task 1: Prepare Evaluation Prioritization Memorandum and Evaluation Planning Documents

1A - Evaluation Prioritization Memorandum

Upon initiation of the Contract, the EM&V Contractor will review:

- Relevant PUCT orders.
- Utility energy efficiency and load management program plans and reports for prior program years, including projected energy savings and, to the degree available, claimed savings.
- Other relevant documents.

As part of this review, the EM&V Contractor will assess the evaluation, measurement, and verification (EM&V) activities and databases the utilities are using for each program to construct their annual claimed savings reports with respect to their applicability and usability for informing the preparation of evaluated savings.

Based on this review, the EM&V Contractor shall develop a memorandum prioritizing the programs to be evaluated and recommending approaches to be undertaken to independently determine the program year portfolio savings and cost-effectiveness. The prioritization shall consider criteria such as evaluation costs, magnitude of savings to be achieved by program, relative uncertainty associated with program savings, length of time since program was last evaluated, and relative importance of program with respect to future energy efficiency portfolios as well as other criteria recommended and approved by PUCT staff.

When sampling is involved in the evaluations, a 90/10 confidence/precision criteria will be used to define sample sizes, unless otherwise approved by PUCT staff. While this confidence/precision level can be defined based on portfolio level savings, key programs may also merit this confidence/precision of sampling; and this should be discussed in the Evaluation Prioritization Memorandum.

EM&V Contractor shall review the Evaluation Prioritization Memorandum with PUCT and utility staff and will modify the memorandum if requested to do so by PUCT staff.

1B – Portfolio EM&V Plan

To be prepared in parallel with the Evaluation Prioritization Memorandum, the EM&V Contractor will develop a detailed Portfolio EM&V Plan for each program year. However, the Evaluation Prioritization Memorandum will need to be finalized and approved by the PUCT staff before the Plan can be completed.

The Plan shall indicate the major evaluation activities that will be conducted during the evaluation cycle to determine gross and net savings and cost-effectiveness. It shall indicate which programs will be evaluated in each specific program year and the verification and/or evaluation approaches that will be utilized for each evaluated program, as well as the basis for why specific programs and approaches were selected.

Specifically, the Plan will include, but is not limited to:

- Identification of and plan for deployment of staff resources and the management of sub-contractors.
- Project schedule and presentation of tasks, sub-tasks, and milestones.
- Project budget, by task, identifying resources including personnel resources associated with the task.
- Specification of any utility reporting requirements including data required, format of data to be provided by utility tracking systems, reporting schedule, and data confidentiality protection protocols that are required by evaluator.
- Plans for data collection and analysis including, but not limited to, document and database review, telephone, mail and/or in-person data collection, field inspections, metering and monitoring, and statistical and economic analysis using appropriately trained and certified personnel. Description of the methodologies, procedures, and data tracking systems to be used by the evaluator to conduct its work for each program including data gathering, sampling, and analysis methods. This shall include sampling plans.
- Identification of how proper use of deemed savings values, deemed calculated approaches, and/or protocols by utilities will be confirmed.
- Plan for determining net energy and demand savings, including what factors will be considered and how they will be determined.
- Plan for determining lifetime energy and demand savings.
- Plan for reviewing and determining the cost-effectiveness of Program Years 2016-2019 portfolios using the PAC test.
- Drawing from the Evaluation Prioritization Memorandum, description of approach for integrating the results of utility's existing internal evaluations into the independent third party assessment. Include which evaluation reports will be used, how the information shall be included, and plans for resolving discrepancies in the savings estimates, should such discrepancies arise.
- Description of how program impact results will be combined to report portfolio impacts, addressing the need for adjustments such as accounting for overlap with other programs (i.e. attribution) or other factors. Include description of weighting procedures for

developing final estimates of portfolio savings in situations where programs receive different levels of evaluation, or in some cases, none at all.

- Description of content and formats for all deliverables and interim deliverables, including data collection instruments, reports, memoranda, project management documents, electronic files, and all other work products or interim products. Reporting tables are of particular interest – samples with data should be provided for review by PUCT staff. Include description of quality assurance/quality control (QA/QC) procedures to be utilized by evaluator.
- Description of metrics and/or criteria that will be used as the basis for any recommendations provided with respect to program designs and/or implementation.
- Description of how evaluation best-practice approaches appropriate to each program will be used. Description of the tradeoffs in allocating limited budget dollars to specific tasks and programs, and why those tradeoffs were selected.
- Description of other activities to be conducted by the evaluator in support of evaluation-related activities. This may include assessing non-energy benefits, preparation of market assessments, and/or saturation and baseline studies as required to prepare impact evaluations

EM&V Contractor shall review the 2016-2019 Portfolio EM&V Plans with PUCT and utility staff and shall modify the Plan if requested to do so by PUCT staff.

1C - Other Planning Documents

Other planning documents will likely be required, including:

- Evaluation Activity-Specific Detailed Research Plans - Research plans are created for the major EM&V activities or studies planned in a given cycle prior to the time each effort is launched. The Evaluation Activity-Specific Detailed Research Plans shall indicate definitions of baselines to be used in the program evaluation.
- Site-Specific M&V Plans - Site-specific plans may be required for custom project sites that are analyzed and inspected. The Site-Specific M&V Plans shall indicate definitions of baselines to be used in the project analysis.

Task 2: Update Technical Reference Manual (TRM)

The EM&V Contractor will maintain and update the existing Technical Reference Manual building on a foundation of the existing Texas, or other state, deemed savings manual(s), protocols, and the work papers used to develop the values in the manual(s). The TRM is expected to include gross annual and lifecycle energy and demand savings values and/or deemed savings calculations. Where appropriate, net savings values will also be included. Measure cost data are not expected to be included in the TRM at this time, although they may be added at a future date. The TRM will also include, for each deemed savings value or deemed savings calculation, applicability requirements such as measure definition; end-use applications; whether measure is for new construction, early replacement, or replacement upon failure; and program delivery mechanism, such as direct install, point of sale rebate, or contractor incentive. The TRM will also include standardized EM&V protocols for determining and/or verifying energy and demand savings for particular measures or programs. The TRM will be reviewed by the EM&V Contractor at least annually, pursuant to a schedule determined by PUCT staff, with the intention of preparing an updated TRM.

EM&V Contractor shall review a complete draft of the TRM with PUCT staff, EEIP stakeholders, and utility staff. EM&V Contractor shall modify the TRM at the request of PUCT staff. No version of the TRM (neither the initial TRM, nor any updated TRMs) is considered complete until PUCT staff approve the TRM version.

Task 3: Implement the Impact Evaluation and Verification Efforts in Accordance with the Approved Evaluation Plans

This task involves the implementation of the evaluation activities specified in the evaluation planning documents approved by the PUCT staff.

- Evaluate, document, and report total portfolio energy savings (gross and net) relative to the targets and baselines established at the time of program approval by the PUCT. At a minimum, the evaluations will include the following information:
    a. Annual and lifecycle MWh and MW savings, evaluated with statistical sampling that achieves 90/10 confidence/precision criteria for the portfolio
    b. Cost-effectiveness as indicated by the PAC test.
- Provide reasonable assurance that the claimed measures are being properly installed and utilized.
- Implement the evaluation activities using generally accepted industry practices.

Activities shall include, but are not limited to:

- Acquiring and verifying data from utilities and other sources.
- Conducting field inspections using trained personnel and installing spot, short-term, and long-term metering equipment on participant property as required by the evaluation plans.
- Reviewing and providing due diligence of utility-claimed savings estimates and baselines.
- Developing survey instruments (using sampling with 90/10 confidence/precision criteria, or other criteria as specified in the planning documents) and collecting and analyzing data.
- Calculating net and gross program and portfolio energy savings.
- Calculating cost-effectiveness results including review of methodology, inputs, and calculation, consistent with PUCT orders.
- Commenting on the accuracy of evaluated savings values; this should include discussion of the threats to validity and sources of bias and the approaches used to reduce threats, reduce bias and increase the reliability of the findings, and a discussion of findings' precision levels.
- Providing input to the PUCT and stakeholders on the implications of the results and recommendations the EM&V Contractor may have with respect to future evaluations or the programs/portfolios themselves.
- Interfacing and coordinating reporting with utilities, PUCT staff, and stakeholders.

Task 4: Additional Activities

The following additional activities may be required and/or requested:

- Preparing an assessment of the effectiveness of program operations and recommendations for each evaluated program with respect to possible improvements that could improve portfolio, program, or measure implementation with respect to savings achieved, cost-effectiveness, or other factors. Recommendations may also include suggestions for other program designs or markets to address as well as suggestions for improving the ability to conduct effective evaluation activities.
- Developing evaluation plans to address issues such as persistence of savings, measure retention, market effects indicative of market transformation, and other research topics that may require investigation. Preparing related market assessment, saturation, and baseline studies as required to prepare impact evaluations.
- Providing experts for hearings; reviewing petitions to amend or develop deemed savings; participating in workshops and other meetings, including EEIP meetings; preparing technical information for possible inclusion in meetings and reports; and informing the PUCT of opportunities for implementing EM&V best practices.

Task 5: Project Management and Reporting

The EM&V Contractor shall conduct required project management and reporting activities, including, but not limited to, holding a project initiation meeting, annual meetings, and a final presentation with PUCT staff, utilities, and stakeholders; development of a Research Prioritization Memorandum and complete evaluation plans (see Task 1); and preparation and delivery of 2016-2019 program years evaluation final report. Interim memoranda and presentations shall also be required at PUCT's request and per a schedule approved in the evaluation plans.

The EM&V Contractor will prepare reports, including, but not limited to:

- Site-Specific Measurement and Verification (M&V) Reports - Site-specific measurement and verification reports are required for projects for which site-specific M&V Plans were developed. These reports document the impacts determined for a specific site or measure as well as the methods used to determine the impacts. Utilities shall have opportunities to provide input on these reports.
- Impact Evaluation Reports - The results of carrying out the evaluation activities described in each Impact Evaluation Plan are documented in an Impact Evaluation Report. The report documents the impacts and cost-effectiveness of a program or bundle of programs as well as the methods used to determine the impacts. Utilities and other stakeholders shall have opportunities to provide input on these reports. The final reports will be publicly available.
- Annual Portfolio Evaluation Reports - The results of carrying out the evaluation activities described in the EM&V Portfolio Plans are documented in a Portfolio Evaluation Report. It documents the impact metrics (e.g., gross and net energy and demand savings, first year, and lifecycle) and cost-effectiveness associated with the portfolio of programs as well as the methods used to determine the impacts. Utilities and other stakeholders shall have opportunities to provide input on these reports. The final reports will be publicly

available.

- The Contractor shall be responsible for delivering draft and final reports that include the following elements:
    - Executive summary
    - A synthesis summary of the evaluation process, results, the implications of the results, and recommendations (this may be a stand-alone document)
    - Introduction and project overview
    - Methods and scope of evaluation
    - Measurement and analysis
    - Results and findings
    - Conclusions and recommendations
    - Appendices
    - Electronic databases with clear documentation

In addition, the reporting is expected to include the following items:

- Bi-monthly – Project status reports submitted to the PUCT highlighting issues with each evaluation activity and problems (difficulties in getting the job done, with recommended or agreed upon solutions).
- Ad-hoc – To document problems, resolutions, and urgent issues as they arise. These reports may also need to be linked to changes in work efforts.

ATTACHMENT B
BILLING RATES

Tetra Tech MA, Inc.	- Bidder Name
12/8/2016	- Date Prepared

Billing Rates
Request for Proposals PUCT
Evaluation Contractor 2017

Proposer provides input in blue shaded cells

Staff			Rate, $/hour				
Job Title	**Employee Name(s)**	**Prime or Sub-Contractor**	**2017**	**2018**	**2019**	**2020**	**4-year Billing Rates Averages 2017-2020**
Project Director	L. Lee	Prime	$ 250.00	$ 255.00	$ 261.00	$ 267.00	$ 258.25
Director	S. Hanson, P. Krecker, P. Rathbun	Prime	$ 247.00	$ 252.00	$ 258.00	$ 264.00	$ 255.25
Manager	K. Bakalars, K. Baslock, R. Hasselman, C. Koenig, E. Rambo, D. Roulean	Prime	$ 220.00	$ 225.00	$ 230.00	$ 235.00	$ 227.50
Principal Consultant	D. Belknap, S. Drake, J. Hoechst, T. Holmes, C. King, L. Stefanik, K. Scott	Prime	$ 207.00	$ 212.00	$ 217.00	$ 222.00	$ 214.50
Senior Associate	J. Durst, H. Farah	Prime	$ 185.00	$ 189.00	$ 193.00	$ 197.00	$ 191.00
Senior Engineer	D. Fitzpatrick	Prime	$ 165.00	$ 169.00	$ 173.00	$ 177.00	$ 171.00
Associate	B. Cevilla	Prime	$ 165.00	$ 169.00	$ 173.00	$ 177.00	$ 171.00
SRC Manager	C. Conrad, K. Luangpoomyut, S. Wagner	Prime	$ 155.00	$ 159.00	$ 163.00	$ 167.00	$ 161.00
Senior Analyst	L. Chang, J. Verbeten, A. White	Prime	$ 145.00	$ 148.00	$ 151.00	$ 155.00	$ 149.75
Engineer	A. Jablonski	Prime	$ 145.00	$ 148.00	$ 151.00	$ 155.00	$ 149.75
Analyst	TBD	Prime	$ 135.00	$ 138.00	$ 141.00	$ 144.00	$ 139.50
SRC Lab Coordinator	G. Zimmerman	Prime	$ 125.00	$ 128.00	$ 131.00	$ 134.00	$ 129.50
Admin Support 1	M. Dodd	Prime	$ 115.00	$ 118.00	$ 121.00	$ 124.00	$ 119.50
Admin Support 2	T. Stevens	Prime	$ 105.00	$ 108.00	$ 111.00	$ 114.00	$ 109.50
Shift Supervisor	TBD	Prime	$ 35.00	$ 36.00	$ 37.00	$ 38.00	$ 36.50
Interviewer	TBD	Prime	$ 30.00	$ 31.00	$ 32.00	$ 33.00	$ 31.50
Principal	S. Khan	Subcontractor	$ 165.00	$ 169.00	$ 173.00	$ 177.00	$ 171.00
Engineering II	T. Glass, H. Chau	Subcontractor	$ 150.00	$ 153.00	$ 157.00	$ 161.00	$ 155.25
Project Mgr III (Sr.)	J. Gomez	Subcontractor	$ 148.00	$ 151.00	$ 155.00	$ 159.00	$ 153.25
Project Dir. / Engr II	M. Bible	Subcontractor	$ 150.00	$ 153.00	$ 157.00	$ 161.00	$ 155.25
Engineer / Designer	J. Pham, C. Petti	Subcontractor	$ 125.00	$ 128.00	$ 131.00	$ 134.00	$ 129.50
Jr. Engineer / Jr. Designer	TBD	Subcontractor	$ 92.00	$ 94.00	$ 96.00	$ 98.00	$ 95.00
Senior CAD Mgr. / Sr. Tech.	R. Shirley	Subcontractor	$ 85.00	$ 87.00	$ 89.00	$ 91.00	$ 88.00
CAD Designer / Tech.	TBD	Subcontractor	$ 70.00	$ 72.00	$ 74.00	$ 76.00	$ 73.00
Jr. Technician	TBD	Subcontractor	$ 59.00	$ 61.00	$ 63.00	$ 65.00	$ 62.00
Office Admin.	H. Bryant	Subcontractor	$ 52.00	$ 54.00	$ 56.00	$ 58.00	$ 55.00
Engineer Aid / Intern	TBD	Subcontractor	$ 45.00	$ 46.00	$ 47.00	$ 48.00	$ 46.50
Office Clerk	TBD	Subcontractor	$ 28.00	$ 29.00	$ 30.00	$ 31.00	$ 29.50
Additional staff categories as needed							
Markup (percent) on subcontractor labor and materials/directs:							4.0%

Tetra Tech MA, Inc	Bidder Name
12/8/2016	Date Prepared

2017 Budget

Request for Proposals PUCT
Evaluation Contractor 2017

Proposal provides input in blue shaded cells

xxxx

Task #	Task Title	Material Costs	Project Director	Director	Manager	Principal Consultant	Senior Associate	Senior Engineer	Associate	SRC Manager	Senior Analyst	Engineer	Analyst	SRC Lab Coordinator	Admin Support 1	Admin Support 2	Shift Supervisor	Interviewer	Principal	Engineering II	Project Mgr III (Sr.)	Project Dir / Engr II	Engineer / Designer	Jr. Engineer / Jr. Designer	Senior CAD Mgr. / Sr. Tech	CAD Designer / Tech	Jr. Technician	Other Admin	Engineer Aid / Intern	Other Clerk	Onsites: Residential Onsites	Onsites: Non-residential Onsites	Total Hours	Cost Using 2017 billing rates
			Estimated Hours Per Job Title (2017)																															
			$ 250.00	$ 247.00	$ 220.00	$ 207.00	$ 185.00	$ 165.00	$ 165.00	$ 155.00	$ 145.00	$ 145.00	$ 135.00	$ 125.00	$ 115.00	$ 105.00	$ 35.00	$ 30.00	$ 165.00	$ 150.00	$ 118.00	$ 150.00	$ 125.00	$ 92.00	$ 85.00	$ 70.00	$ 59.00	$ 52.00	$ 45.00	$ 28.00	$575.00	$1,500.00		
1A	Evaluation Prioritization Matrix		20		16																												36	$ 8,520.00
1B	Portfolio EM&V Plan		80		34	16	16																										146	$ 33,752.00
1C	Other Planning Documents		20		16	24	16																										68	$ 14,792.00
2	Develop and Maintain TRM		100		100	100	120					100							60	40	60	40	60										780	$ 143,380.00
3	Implement the Impact Evaluation and Verification Efforts																																	$
	Task 3: Data Collection		40		250	500			100	365	200	100		135	8	20	325	1650		40	60	60	80					40			100	87	4,053	$ 606,365.00
	Task 3: Analysis		250		400	450	55		150		376	120																					1,801	$ 330,495.00
	Task 3: Other		100		250	240					40																						630	$ 135,480.00
4	Additional Activities		300		300	320			90		80	40																					990	$ 210,890.00
5	Project Management and Reporting	$ 5,346.40	400		300	200	20		40		160								40			40											1,200	$ 250,846.40
	Markup on subcontractor labor & materials/directs 4%																																4.0%	$ 11,013.60
	Totals	$ 5,346.40	1310	0	1566	1922	227	0	340	365	854	360	0	135	8	20	325	1650	100	80	120	160	120	0	0	0	0	40	0	0	100	87	9,704	$ 1,773,334.00

Tetra Tech MA, Inc	Bidder Name
12/8/2016	Date Prepared

2018 Budget
Request for Proposals PUCT
Evaluation Contractor 2017

Proposal provides input in blue shaded cells

	Task	Material Costs	Estimated Hours Per Job Title (2018)																																	
			Project Director	Director	Manager	Principal Consultant	Senior Associate	Senior Engineer	Associate	SRC Manager	Senior Analyst	Engineer	Analyst	SRC Lab Coordinator	Admin Support 1	Admin Support 2	Staff Supervisor	Interviewer	Principal	Engineering II	Project Mgr III (Sr.)	Project Dir / Engr II	Engineer / Designer	Jr. Engineer / Jr. Designer	Senior CAD Mgr. / Sr. Tech	CAD Designer / Tech	Jr. Technician	Office Admin	Engineer Aid / Intern	Office Clerk	Onsites: Residential Onsites	Onsites: Non-residential Onsites	Total Hours	Cost Using 2018 billing rates
Task #	Task Title		$ 255.00	$ 252.00	$ 225.00	$ 212.00	$ 180.00	$ 160.00	$ 160.00	$ 150.00	$ 148.00	$ 148.00	$ 138.00	$ 128.00	$ 118.00	$ 108.00	$ 96.00	$ 91.00	$ 160.00	$ 153.00	$ 151.00	$ 153.00	$ 128.00	$ 94.00	$ 87.00	$ 72.00	$ 61.00	$ 54.00	$ 46.00	$ 29.00	$ 571.00	$ 1,580.00		
1A	Evaluation Prioritization Memo		20		16																												36	$ 8,700.00
1B	Portfolio EM&V Plan		80		50	16	16		16																								178	$ 40,770.00
1C	Other Planning Documents		20		16	16	16		16																								84	$ 17,820.00
2	Develop and Maintain TRM		100		100	100	120		120			100							60	40	42	46	40										660	$ 144,720.00
3	Implement the Impact Evaluation and Verification Efforts																																-	$ -
	Task 3: Data Collection		80		250	600			100	270	140			115	10	20	200	1100		40	42	44	60					40				88	3,101	$ 498,872.00
	Task 3: Analysis		250		350	500	80		200		340	200																					1,920	$ 377,340.00
	Task 3: Other		100		300	250					40	80																					770	$ 163,760.00
4	Additional Activities		300		220	350			60		80	80																					1,090	$ 235,820.00
5	Project Management and Reporting	$ 5,585.04	360		320	250	40		50		160								40			40											1,260	$ 274,955.04
	Markup on subcontractor labor & materials/directs, 4%																																4.0%	$ 8,366.96
	Totals	$ 5,585.04	1270	0	1630	2082	272	0	562	290	760	460	0	115	10	20	200	1100	100	80	84	130	100	0	0	0	0	40	0	0	0	88	9,315	$ 1,788,104.00

Tetra Tech MA, Inc.	Bidder Name
12/8/2016	Date Prepared

2019 Budget

Request for Proposals PUCT
Evaluation Contractor 2017

Proposer provides input in blue shaded cells

	Task	Material Costs	Estimated Hours Per Job Title (2019)																													Quotes		Total Hours	Cost Using 2019 Billing rates
			Project Director	Director	Manager	Principal Consultant	Senior Associate	Senior Engineer	Associate	SRC Manager	Senior Analyst	Engineer	Analyst	SRC Lab Coordinator	Admin Support 1	Admin Support 2	Staff Supervisor	Interviewer	Principal	Engineering II	Project Mgr III (Sr.)	Project Dir. / Engr II	Engineer / Designer	Jr. Engineer / Jr. Designer	Senior CAD Mgr / Sr. Tech.	CAD Designer / Tech.	Jr. Technician	Office Admin	Engineer Aid / Intern	Office Clerk	Residential Quotes	Non-residential Quotes		
Task #	Task Title	rates	$ 364.00	$ 258.00	$ 230.00	$ 217.00	$ 195.00	$ 173.00	$ 173.00	$ 163.00	$ 151.00	$ 151.00	$ 141.00	$ 131.00	$ 123.00	$ 111.00	$ 37.00	$ 32.00	$ 173.00	$ 157.00	$ 155.00	$ 157.00	$ 131.00	$ 96.00	$ 80.00	$ 74.00	$ 63.00	$ 56.00	$ 47.00	$ 40.00	$ 575.00	$1,500		
1A	Evaluation Prioritization Memo		20		16																												36	$ 8,900.00
1B	Portfolio EM&V Plan		80		30	16	16		20																								166	$ 38,720.00
1C	Other Planning Documents		20		16	16	16		20																								88	$ 18,920.00
2	Develop and Maintain TRM		100		100	200	120		120			100							50	40	60	60	40										990	$ 198,967.00
3	Implement the Impact Evaluation and Verification Efforts																																	$ -
	Task 3: Data Collection		80		250	550			200		100									40	60	60	80					40			100	87	1,420	$ 462,710.00
	Task 3: Analysis		250		350	450	100		300		400	250																					2,100	$ 412,750.00
	Task 3: Other		100		250	220					120	70																					760	$ 160,030.00
4	Additional Activities		300		200	320			50		192	80																					1,052	$ 229,872.00
5	Project Management and Reporting	$ 5,450.32	360		300	200	80		40		160								40			40											1,220	$ 271,530.32
	Markup on subcontractor labor & materials/directs 4%																																4.0%	$ 11,174.66
	Totals	$ 5,450.32	1270	0	1516	1972	332	0	750	0	882	500	0	0	0	0	0	0	90	80	120	160	120	0	0	0	0	40	0	0	100	87	7,841	$ 1,806,574.00

Tetra Tech MA, Inc	Bidder Name
12/9/2016	Date Prepared

2020 Budget
Request for Proposals PUCT
Evaluation Contractor 2017

Proposer provides input to blue shaded cells

Task #	Task Title	Material Costs	Project Director	Director	Manager	Principal Consultant	Senior Associate	Senior Engineer	Associate	SRC Manager	Senior Analyst	Engineer	Analyst	SRC Lab Coordinator	Admin Support 1	Admin Support 2	Staff Supervisor	Interviewer	Principal	Engineering II	Project Mgr III (Sr.)	Project Dir / Engr II	Engineer / Designer	Jr. Engineer / Jr. Designer	Senior CAD Mgr / Sr. Tech.	CAD Designer / Tech.	Jr Technician	Office Admin.	Engineer Aid / Intern	Office Clerk	Residential Outlier	Non-residential Outlier	Total Hours	Cost Using 2020 billing rates
		rates	$ 262.00	$ 264.00	$ 235.00	$ 222.00	$ 199.00	$ 177.00	$ 177.00	$ 167.00	$ 155.00	$ 155.00	$ 144.00	$ 134.00	$ 124.00	$ 114.00	$ 38.00	$ 33.00	$ 177.00	$ 168.00	$ 199.00	$ 161.00	$ 114.00	$ 98.00	$ 91.00	$ 36.00	$ 65.00	$ 58.00	$ 48.00	$ 41.00	$ 375.00	$ 1,500.00		
1A	Evaluation Prioritization Memo		20		14																												36	$ 9,100
1B	Portfolio EM&V Plan		80		34	16	16		16																								162	$ 38,886
1C	Other Planning Documents		20		16	16	16		16																								84	$ 18,636
2	Develop and Maintain TRM		100		100	200	120		120			70							60	40	40	40	40										970	$ 190,950
3	Implement the Impact Evaluation and Verification Efforts																																	$
	Task 3: Data Collection		40		250	550			200		250									40	41	60	80					40				88	1,571	$ 436,519
	Task 3: Analysis		250		350	450	100		300		400	250																					2,100	$ 422,650
	Task 3: Other		100		250	220					150	100																					820	$ 173,040
4	Additional Activities		300		200	320			50		150	100																					1,120	$ 245,740
5	Project Management and Reporting	$ 5,053.34	360		300	200	80		40		160								40			40											1,220	$ 277,214
	Markup on subcontractor labor & materials/direct: 4%																																0	$ 9,859.16
	Totals	$ 5,053.34	1270	0	1514	1972	332	0	742	0	1110	520	0	0	0	0	0	0	100	80	121	160	120	0	0	0	0	40	0	0	0	88	8,081	$ 1,822,574.00

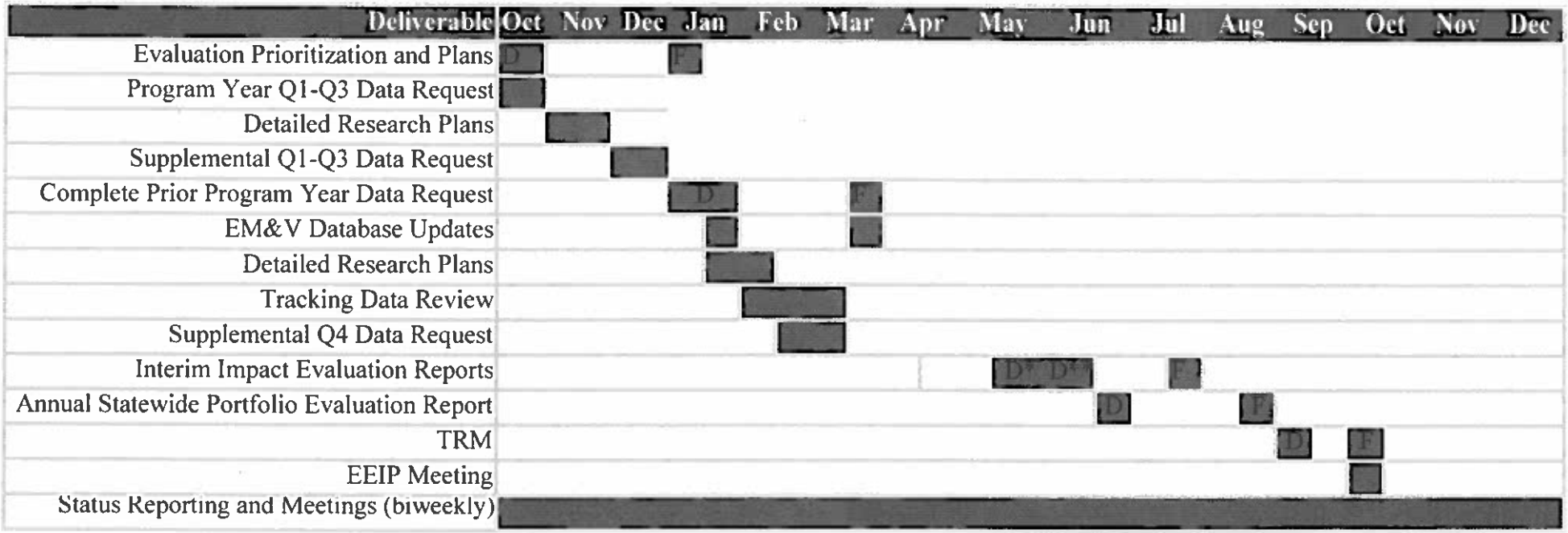
Note: "Estimated Hours Per Job Title (2020)" spans the job-title columns; "Outliers" spans the Residential Outlier and Non-residential Outlier columns.

Tetra Tech MA, Inc	Bidder Name
12/8/2016	Date Proposed

Total 2017-2020 Budget
Request for Proposals PUCT
Evaluation Contractor 2017

Task	Task	Material Costs	Project Director	Director	Manager	Principal Consultant	Senior Associate	Senior Engineer	Associate	SRC Manager	Senior Analyst	Engineer	Analyst	SRC Lab Coordinator	Admin Support 1	Admin Support 2	Shift Supervisor	Interviewer	Principal	Engineering II	Project Mgr (II-Sr)	Project Dir / Engr II	Engineer / Designer	Jr Engineer / Jr Designer	Senior CAD Mgr / Sr Tech	CAD Designer / Tech	Jr Technician	Office Admin	Engineer Aid / Intern	Office Clerk	Overtime - 2017-2020 Residential Qualifies	Non-residential Qualifies	Total Hours	Cost Using 2017-2020 Billing rates
			Estimated Hours Per Job Title -2017-2020-																															
1A	Evaluation Prioritization Status	$ -	80	-	64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	144	$ 35,220.00
1B	Certification EM&V Plan	$ -	320	-	152	64	64	-	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	652	$ 152,128.00
1C	Other Planning Documents	$ -	80	-	64	64	64	-	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	324	$ 70,168.00
2	Develop and Maintain TRM	$ -	400	-	400	600	480	-	360	-	-	370	-	-	-	-	-	-	239	160	222	226	160	-	-	-	-	-	-	-	-	-	3,617	$ 688,817.00
3	Implement the Impact Evaluation and Verification Efforts	$ -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	$ -
	Task 1: Data Collection	$ -	160	-	1,000	2,280	-	-	600	661	690	100	-	250	18	40	529	2,750	-	160	223	224	300	-	-	-	-	160	-	-	200	350	10,145	$ 2,004,466.00
	Task 2: Analysis	$ -	1,000	-	1,450	1,850	335	-	950	-	1,516	820	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,921	$ 1,563,055.00
	Task 3: Other	$ -	400	-	1,050	930	-	-	-	-	350	250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,980	$ 632,310.00
4	Additional Activities	$ -	1,200	-	828	1,310	-	-	210	-	412	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,260	$ 922,322.00
5	Project Management and Reporting	$ 21,415.60	1,480	-	1,220	850	220	-	170	-	640	-	-	-	-	-	-	-	160	-	-	160	-	-	-	-	-	-	-	-	-	-	4,900	$ 1,082,545.60
	Markup on subcontractor labor & materials/directs: 4%																																4%	$ 39,574.40
	Totals	$ 21,415.60	5,120	-	6,228	7,948	1,163	-	2,394	661	3,608	1,840	-	250	18	40	529	2,750	399	320	445	610	460	-	-	-	-	160	-	-	200	350	34,943	$ 7,190,586.00

ATTACHMENT C
GANTT CHART OF DEADLINES



ft (*-non ERCOT utilities, **-ERCOT utilities)

F=Final