

CONTRACT NO. 473-16-0001
BETWEEN
THE PUBLIC UTILITY COMMISSION OF TEXAS,
THE ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC.,
AND
POTOMAC ECONOMICS, INC.

The parties to this Contract No. 473-16-0001 for Independent Market Monitor (IMM) Services, are the Public Utility Commission of Texas (PUCT), an agency of the State of Texas with its office located at 1701 N. Congress Ave., Austin, Texas 78701, the Electric Reliability Council of Texas, Inc. (ERCOT), a Texas nonprofit corporation, located at 7620 Metro Center Drive, Austin, Texas 78744, and Potomac Economics (Contractor), a Virginia corporation, located at 9990 Fairfax Boulevard, Suite 560, Fairfax, Virginia 22030.

Article 1. DEFINITIONS

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

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

1.2 "Contractor" includes Potomac Economics, 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).

1.4 "ERCOT" means the Electric Reliability Council of Texas, Inc., a Texas non-profit corporation.

1.5 "Parties" means PUCT, ERCOT and Contractor. **"Any Party"** PUCT, ERCOT, or Contractor.

Article 2. COMPENSATION

2.1 Compensation. Contractor agrees to provide all Services described in Attachment A, SOW, for the firm fixed price of \$14,600,000. The costs shall be billed monthly consistent with the schedule provided in Section IV.A. of Attachment A. Additionally, Contractor may bill at the rates specified in Section 6.6 for costs incurred by Contractor to comply with the requirements in Section 2.2 E. of Attachment B, with the limitations set out in Section IV.A. of Attachment A. Contractor understands that the PUCT and ERCOT are 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 or the utilization of outside experts 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 any increase in fee by written amendment to this Contract before the Contractor performs any additional services, engages a subcontractor, or may invoice the increased fee.

2.2 Payment Process. Contractor shall submit a monthly statement for services or invoice to the

PUCT Contract Administrator with a copy to the ERCOT Contract Administrator no later than the 15th business day after the month that the Services were performed. The invoice must contain 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 brief 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

Within five (5) business days of receiving the invoice, the PUCT Contract Administrator will review the invoice, and, if approved, notify the Contractor and submit the invoice to ERCOT for payment. If the invoice is insufficient, the PUCT Contract Administrator will notify the ERCOT Contract Administrator and return the invoice to Contractor for correction, along with a description of any insufficiencies.

ERCOT shall pay all PUCT approved and undisputed amounts within thirty (30) days of receipt of Contractor's invoice from PUCT.

2.3 Payment for Services. Contractor's acceptance of ERCOT's payment for invoiced Services releases the PUCT of all claims for compensation owed in connection with this Contract for the month invoiced, unless Parties agree otherwise in writing.

2.4 Payments made to Subcontractors. Contractor shall pay any subcontractor hereunder the appropriate share of payments received for the Services 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, ERCOT, and/or its designees or the State Auditor during normal business hours with reasonable notice, upon the request of the PUCT Contract Administrator or ERCOT 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 **Mick Long** to serve as its primary point of contact and Contract Administrator throughout the term of this Contract. Contractor and ERCOT acknowledge 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 ERCOT Contract Administration. ERCOT designates **Jimmy Ramirez** to serve as its primary point of contact and Contract Administrator throughout the term of this Contract. Contractor and PUCT acknowledge that the ERCOT Contract Administrator does not have any authority to amend this Contract on behalf of ERCOT, except as expressly provided herein. Contractor further acknowledges that such authority is exclusively held by the ERCOT President and Chief Executive Officer or his/her authorized designee.

3.2 Contractor Contract Administration. Contractor designates its Contract Administrator as follows: **David Patton**

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' respective 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 will promptly refer to the PUCT Contract Administrator all inquiries regarding this Contract received from state legislators, other public officials, the media, or non-Parties.

Article 4. REPORTS AND RECORDS

4.1 Written Reports. Contractor will provide written reports to the PUCT and/or ERCOT in the form and with the frequency specified in Attachment A, SOW, 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 its own employees. 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 January 1, 2016 and shall continue in effect until December 31, 2019 unless sooner terminated under Sections 6.3, 6.4, 6.5, or 18.12 of this Contract.

6.2 Options for Renewal. This Contract does not provide for any extension options.

6.3 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, except as limited under this Contract. If PUCT terminates Contractor under Section 18.12, PUCT need not provide any notice or opportunity for curing the default. Contractor's liability is limited to the price of the contract, as calculated by monthly fees owed to the Contractor from the receipt of the notice of default up to the date that the default is cured or the termination date.

6.4 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 compensate the Contractor at the rate specified in this Contract for all Services provided until the effective date of the termination. The PUCT shall not be liable for any damages and/or loss to Contractor as a result of termination for convenience.

6.5 Termination for Cause by Contractor. If the PUCT or ERCOT is in default of any material term of this Contract, the Contractor may serve upon the PUCT and ERCOT written notice of default requiring the PUCT or ERCOT to cure such default. The PUCT or ERCOT has thirty (30) days after receipt of notice to correct the default or make arrangements satisfactory to Contractor for correcting the default. If, by the end of the cure period, the PUCT or ERCOT has failed to cure the default or to make arrangements satisfactory to Contractor to correct the

default, Contractor may terminate this Contract for default and shall have all rights and remedies provided by law, except as limited under this Contract. PUCT and ERCOT's liability is limited to the price of the contract, as calculated by monthly fees owed up to the termination date.

6.6. Transfer of Duties. In the event of termination, Contractor will provide reasonable cooperation until the effective date of termination to transfer its duties under the Contract to another entity without disruption to the provision of Services. For any services provided by Contractor pursuant to this Section 6.6 subsequent to the effective date of termination of this Contract, ERCOT shall compensate Contractor for such services at its standard hourly rate as of the effective date of termination. The hourly rates to be billed would be:

Name	Title	Rate
David Patton	President	\$485
Beth Garza	Vice President	\$375
Steve Reedy	Deputy Director	\$300
Young Li	Senior Associate	\$295
Kristi Denney	Legal Counsel	\$290
Other ERCOT IMM Staff	Economists/Analysts	\$250
Michael Wander	Vice President	\$350
Robert Sinclair	Vice President	\$385
Pallas LeeVanSchaick	Vice President	\$370
Michael Chiasson	Vice President	\$350
Kelvin Green	Director of IT and Cybersecurity	\$340
Jie Chen	Director	\$340
Jason Fogarty	Vice President	\$345
Matthew Carrier	Director of Operations	\$295
Doug Lassiter	Software Developer	\$290
Mark Lassiter	Software Developer	\$290
Raghu PalavadiNaga	Senior Associate	\$285
Carrie Milton	Senior Associate	\$280
Arjun Garg	Associate	\$245
John Patton	Senior Associate	\$280
Yong Tang	Associate	\$245
Tao Qin	Associate	\$245
Craig Brown	Associate	\$245
Max Epstein	Senior Associate	\$275

6.7 Remedies for Breach. All remedies available to any Party for breach or anticipatory breach of this Contract by any other Party 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. Liquidated damages, 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. This in no way waives any immunity PUCT may have from any type of damages under the doctrine of sovereign immunity.

6.8 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 (Records), 3.5 (Inquiries and Prompt Referral), 4.2 (Distribution of Consultant's Reports),

6.6 (Transfer of Duties), 6.7 (Remedies for Breach), 9.2 (Ownership), 9.4 (PE Software), 9.5 (Trademarks), 9.6 (Program Information), 11.4 (Revolving Door), 17.2 (Taxes) and 19.1 (Relationship of the Parties), 19.2 (Non-Exclusivity), 19.3 (Taxes and Statutory Withholdings), 19.4 (Notices), 19.9 (Publicity) and Articles 1 (Definitions), 10 (Public Information), 12 (Indemnification and Limitation of Liability), 14 (Dispute Resolution), 15 (Sovereign Immunity), 16 (Governing Law), 20 (No Implied Waiver), 21 (Order of Precedence), 23 (Severability), and 27 (Entire Agreement) shall survive in their entirety.

Article 7. ASSIGNMENT, AMENDMENTS, AND MODIFICATIONS

7.1 Material Change Requests. PUCT and/or ERCOT may propose changes to Attachment A, SOW. Upon receipt of a written request from the PUCT and/or ERCOT for a change to Attachment A, SOW, Contractor shall, within a reasonable time thereafter, submit to the PUCT and ERCOT a detailed written estimate of any proposed price and schedule adjustment(s) to this Contract. No changes to Attachment A, SOW, 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 all of the Parties in accordance with the terms of this Contract.

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 of suppliers providing comparable services in the professional industry.

8.2 Warranty of Services. Contractor warrants that the Services shall be rendered by the qualified personnel named in, or authorized in accordance with, 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 pursuant to the Contract 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 PE Software and 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, purchased and/or prepared for 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. Notwithstanding the foregoing, materials created, purchased and/or prepared exclusively by or for 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 and ERCOT 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 PE Software. "PE Software" means software that has been developed by the Contractor to produce the indices, metrics and screens used by the Contractor to monitor the ERCOT markets. PE Software includes all revisions, modifications and enhancements to such PE Software that may be delivered to ERCOT pursuant to this Contract, as well as all documentation concerning the PE Software, all media on which such PE Software resides, and all copies of the above. Notwithstanding anything in this Contract to the contrary, ERCOT and PUCT agree that with respect to the PE Software and Contractor's proprietary and confidential materials developed prior to commencing, or outside the scope of, the Services that are proprietary to Contractor, and all associated intellectual property rights and any enhancements and modifications to such materials, whether or not such enhancements and modifications are developed as part of the Services, Consultant shall retain ownership thereof, including, without limitation, all right, title and interest in the PE Software.

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 and ERCOT acknowledge and agree that use of any trademark associated with any software provided by Contractor under this Contract does not give the PUCT or ERCOT 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 handle and store this information using a reasonable standard of care.

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, ERCOT 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. The Commission will also notify ERCOT of requests for ERCOT's information as provided under the PIA. If there is ambiguity regarding whether the information belongs to ERCOT or Contractor, the Commission will notify both.

10.2 Contract 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." Additionally, the parties acknowledge that this Contract will be posted on the PUCT's public website, pursuant to Texas Government Code Section 2261.253. The Parties further acknowledge 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 public information created or exchanged with the state and/or ERCOT pursuant to this contract. If public information created or exchanged with the state and/or ERCOT 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. Subject to Section 11.5, Contractor certifies to the Commission and ERCOT that no existing or contemplated relationship exists between Contractor and the Commission or ERCOT 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 or ERCOT. Subject to Section 11.5, 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 or ERCOT. 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. Similarly, ERCOT may waive this provision, as it relates to ERCOT, in writing if, in ERCOT's sole judgment, such activities of the Contractor will not be adverse to the interests of ERCOT. Neither ERCOT nor the Commission may waive the other's right to prohibit a transaction between Contractor and any 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 or ERCOT.

11.3 Notice of Conflict. Contractor agrees to promptly notify the PUCT and ERCOT 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 and ERCOT. Contractor's failure to do so shall be grounds for termination of this contract for cause, pursuant to Section 6.3.

11.4 Revolving Door. Contractor agrees that it will not hire any current or former PUCT employees whose employment with contractor would violate any of the revolving door provisions in the Texas Government Code or the Public Utility Regulatory Act (Title II, Texas Utilities Code).

11.5 The PUCT and ERCOT recognize that the Contractor performs independent monitoring of other ISOs and RTOs, and Independent Monitoring of resource procurement processes and the provision of transmission services by other transmission operators and utilities. Independent Monitoring is defined to include only services that are performed on behalf of or required and overseen by a State Regulatory Commission or the Federal Energy Regulatory Commission. The Contractor shall notify the PUCT of any current or new Independent Monitoring engagements and the PUCT shall have the right to review the tariffs, orders, contracts, and agreements to confirm that it qualifies as Independent Monitoring services. PUCT may require Contractor to initiate reasonable and effective safeguards (including, for example, but not limited to, screening Contractor's staff performing duties in ERCOT from Contractor's other activities with ERCOT market participants, parents or affiliates) to ensure the independence of its Services under this Contract.

Contractor certifies that it does not and will not perform any other services for any market participants that operate in ERCOT or any parent or affiliate of an ERCOT market participant, whether or not the services relate to operations within ERCOT. The PUCT and ERCOT acknowledge that Independent Monitoring services do not present any conflict of interest with respect to this Contract.

Article 12. INDEMNIFICATION AND LIMITATION OF LIABILITY

The IMM, and its directors, officers, employees, and agents shall not be liable to any person or entity for any act or omission, other than an act or omission constituting gross negligence or intentional misconduct, including but not limited to, liability for any financial loss, loss of economic advantage, opportunity cost, or actual, direct, indirect, or consequential damages of any kind resulting from or attributable to any such act or omission of the IMM, as long as such act or omission arose from or is related to matters within the scope of the IMM's authority arising under or relating to PURA §39.1515 and Public Utility Commission Substantive Rule §25.365, relating to Independent Market Monitor.

Except as specifically stated herein, Contractor shall indemnify, defend and hold harmless the PUCT, the State of Texas, ERCOT and their 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 arising out of acts or omissions of Contractor, its agents, employees and subcontractors, that constitute gross negligence or intentional misconduct committed in the conduct of this Contract.

Contractor shall have the obligation to undertake the defense of any such claim, process, or legal proceeding alleging (i) gross negligence or intentional misconduct from or attributable to any act or omission of Contractor in the performance of the Services, or (ii) that any software or deliverable provided by Contractor infringes any United States copyright, trade secret, trademark

or patent. Contractor will defend such claim at its expense and will pay ERCOT's and PUCT's reasonable defense costs, provided, however, that ERCOT and the PUCT may participate in the defense, at their expense, with counsel of their 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 when Texas State Agencies are named defendants in any lawsuit. Contractor, the PUCT, and ERCOT agree to furnish timely written notice to each other of any such claim.

If all or any part of a deliverable is the subject of any claim, suit, or proceeding for infringement or misappropriation of any U.S. intellectual property right, Contractor shall, at its expense and option do one of the following things: (i) procure for ERCOT and 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; or if none of the foregoing options are commercially reasonable, (iv) direct the return of the deliverable and refund to ERCOT the fees paid for such deliverable.

Contractor will not indemnify ERCOT or PUCT, however, to the extent the claim of infringement is based on: (a) ERCOT's modification of the software or deliverable or use of the deliverable other than as contemplated by this Contract and the applicable SOW; (b) ERCOT's failure to use corrections or enhancements provided to it by Contractor where infringement could have been avoided by use of such corrections or enhancements; (c) ERCOT's use of the software or deliverable in combination with any product or information not owned or developed or authorized by Contractor; or (d) Contractor's compliance with information, direction, specification or materials provided by ERCOT or the PUCT or its agents where such compliance gave rise to the infringement claim. Additionally, Contractor will not indemnify ERCOT or PUCT for liabilities, claims, suits, assessments, penalties, losses, damages, demands or causes of action arising out of or alleging negligence or misconduct by employees, agents, or subcontractors of the PUCT or ERCOT.

Contractor's obligations under this Article 12 are conditioned upon the indemnified Party (i) promptly notifying Contractor of any claim in writing, (ii) reasonably cooperating with the Contractor's defense of the claim and (iii) giving the Contractor full authority to defend or settle the claim or suit; except as provided herein when Texas State Agencies are named defendants in any lawsuit.

ERCOT shall indemnify, defend and hold harmless Contractor, their 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 arising out of acts or omissions of ERCOT, its agents, employees and subcontractors, that constitute gross negligence or intentional misconduct.

Article 13. INSURANCE

13.1 Legal Compliance. Contractor agrees to comply with all state and federal laws applicable

to its performance of the Services and payment of its employees, including laws regarding wages, taxes, insurances, and workers' compensation. Neither the PUCT nor the State of Texas nor ERCOT 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.

13.2 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, the State of Texas, and ERCOT:

(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);

(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; and

(d) a fidelity bond or crime policy in the amount of \$1,000,000 with third party coverage for ERCOT and the PUCT for Contractor's employees working on ERCOT premises or working with ERCOT intellectual property, proprietary information, or Confidential Information.

The PUCT, the State of Texas, and ERCOT shall be named additional insureds 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.

13.3 Certificates of Insurance. Contractor shall furnish to the PUCT and ERCOT 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 and ERCOT 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 promptly, 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 involving the PUCT 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 ERCOT rules and procedures, and will inform and consult with the PUCT and ERCOT 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. In the event that Contractor becomes aware of inconsistencies between this Contract and an ERCOT policy or procedure, Contractor will so advise ERCOT and 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.

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.

18.9 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.

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 Contractor 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 Contract terminated under this Section 18.12.

This Section 18.12 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 or ERCOT 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 and/or ERCOT. This Contract shall not restrict PUCT or ERCOT 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 or ERCOT employee, but is an independent contractor. Accordingly, it is solely Contractor's 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 and ERCOT harmless to the extent of any obligation imposed by law on the PUCT or ERCOT 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 or ERCOT 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 or ERCOT 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 with FedEx.

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 Erica Duque, CTPM, CTCM, at the same address.

IF TO ERCOT:

ATTENTION: General Counsel
7620 Metro Center Drive
Austin, Texas 78744

IF TO CONTRACTOR:

ATTENTION:
David Patton
Potomac Economics, Ltd.
9990 Fairfax Boulevard, Suite 560
Fairfax, Virginia 22030

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 acknowledgments. 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: David Patton, Ph.D., Beth Garza, Steve Reedy, Young Li, Ph.D., Bryan Zhang, Ph.D., Emily Zhou, Thuy Huynh, Tony Garcia, and Kristi Denney.

Contractor warrants that it shall use its best efforts to avoid any changes to the Team during the course of this Contract. This provision shall not be deemed to prohibit the Contractor from dismissing any employee with or without cause at the sole discretion of Contractor, nor to otherwise alter the at-will status of any of Contractor's employees.

Should changes in the senior personnel, including the IMM Director, Deputy Director, and Attorney, occur during the term of this Contract or any extensions or renewals thereof, Contractor will recommend to the PUCT senior personnel with comparable experience and required qualifications and training. The PUCT Contract Administrator must approve any change in senior 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 satisfactory individual as soon as practicable and notify the PUCT when the individual is selected.

19.9 Publicity. Contractor understands that the PUCT and ERCOT do not endorse any vendor, commodity, or service. Contractor understands and agrees that Contractor, its employees, representatives, other agents, or subcontractors may not issue any public disclosure, media release, advertisement, or publication that asserts or implies an endorsement of the Contractor without the prior written approval of the PUCT and ERCOT.

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;
- 2) Attachment A, SOW, including any exhibits; and
- 3) Attachment B, ERCOT Supplemental Terms.

Article 22. FORCE MAJEURE

Neither the PUCT nor Contractor nor ERCOT 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 any 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 parties 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, any party thereafter may terminate this contract upon giving at least ten (10) days prior written notice to the other parties.

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. See Texas Constitution, Article III Section 49, State Debts; and Texas General Appropriations Act for the 2015-2016 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. RIGHT TO AUDIT

The State Auditor may conduct an audit or investigation of Contractor or any other entity or person receiving funds directly under this Contract or indirectly through a subcontract under this Contract. The acceptance of funds by Contractor under this Contract or any other person or entity 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 27. ENTIRE AGREEMENT

This Contract, including Attachment A, SOW, 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 all parties by their duly authorized representatives have executed this contract effective as of January 1, 2016.

The Public Utility Commission of Texas

By: B. Lloyd

Brian H. Lloyd
Executive Director

Date Signed: 12/29/15

Potomac Economics

By: David B. Patton

David B. Patton
President

Date Signed: 12/29/15

Electric Reliability Council of Texas

By: G. Roberts

Printed Name: G. Roberts

Title: Director of Procurement

Date Signed: 12-30-15



ATTACHMENT A
STATEMENT OF WORK

I. Scope of Services.

Subject to the PUCT's supervision and oversight, the Contractor will act as the Independent Market Monitor (IMM) for the Electric Reliability Council of Texas (ERCOT) Region. Contractor will be responsible for monitoring the wholesale electricity market in the ERCOT power region, including all markets for energy, ancillary capacity services, and congestion revenue rights, and monitoring all aspects of ERCOT's operations that affect supply, demand, and the efficient functioning of the competitive wholesale electricity market. The tasks, duties, and responsibilities of the Contractor will include the following:

A. Market Knowledge.

- a. The IMM Director must be knowledgeable and keep that knowledge current regarding market monitoring in an electricity market.
- b. Contractor will hire an IMM Director and staff to carry out the day-to-day monitoring functions specified in this Contract.
- c. The Contractor, IMM Director, and staff must promptly become familiar with the ERCOT Protocols ("Protocols") and all PUCT Rules and Texas statutes relating to the wholesale electricity market, including, but not limited to, wholesale market design and operations, restrictions on the existence and abuse of market power, and market monitoring. The Contractor must also be familiar with the enforcement authority, policies, and procedures of the PUCT.

B. Detection and Prevention of Manipulation and Assessment of Market Power in ERCOT Wholesale Markets. The Contractor shall develop and refine tools to gather and analyze information and data as needed for its market monitoring activities and actively monitor the wholesale electricity market in the ERCOT power region, pursuant to the direction of the PUCT, including the following:

- a. Develop and refine tools and information to identify abnormal events and potentially anticompetitive behavior in the ERCOT wholesale electricity market through the use of market screens and indices;
- b. Continuously monitor the wholesale power market through the use of market screens and indices to identify any abnormal wholesale market events;
- c. Conduct market power tests, monitor structural indicators of market power, and conduct other analyses related to market power determination;
- d. Analyze events that fail the screens and indices, potentially anti-competitive behavior, and other abnormal activities and market events through the use of

computer simulation and advanced quantitative tools as necessary, and initiate informal discussion of events with ERCOT and PUCT staff and market participants, if appropriate;

- e. Conduct investigations of specific market events when anomalies are discovered and prepare reports regarding same; and
- f. Coordinate with the PUCT and ERCOT to develop procedures for the coordination of investigative activities among the Contractor, ERCOT, and PUCT, and for PUCT approval of investigations that require significant resources.

C. Evaluation of Wholesale Market Operations, Current Protocols and Proposed Changes to the Protocols. The Contractor will evaluate the operation of the wholesale electricity market and will assist PUCT and ERCOT by developing recommendations for enhancing the competitiveness and efficiency of ERCOT administered markets. The Contractor will:

- a. Develop, refine, and regularly monitor market performance measures to evaluate market participants' compliance with ERCOT Protocols that have a material impact on the efficiency or competitiveness of the ERCOT market;
- b. Evaluate whether ERCOT manages the markets it administers in accordance with the Protocols;
- c. Assess the effectiveness of ERCOT's management of the energy, ancillary capacity services, and congestion rights markets, and evaluate the effectiveness of congestion management and system operations by ERCOT;
- d. Analyze the Protocols and proposed changes to the Protocols to identify potential reliability impacts, opportunities for strategic manipulation, and other economic inefficiencies;
- e. Attend ERCOT stakeholder meetings relating to current market issues and changes in market design;
- f. Interact with market participants to better understand their operations and market behavior; and
- g. Recommend measures to enhance market efficiency and improve market design.

D. Reporting Obligations and Enforcement Support. The PUCT is responsible for enforcement activities and prosecutions, as discussed in further detail below under the headings "PUCT Enforcement Support" and "PUCT Supervision." Contractor will assist and support the PUCT in its enforcement and prosecution obligations by promptly developing informative reports and supporting PUCT enforcement activities. As part of this assistance, the Contractor will:

- a. **Timely and directly report to PUCT Commissioners and the PUCT liaison any irregular or potentially anti-competitive behavior, including any potential market manipulations, market power abuse, or market power strategies, and any discovered or potential violations of PUCT Rules or ERCOT Protocols or operating guides;**
- b. **Submit to the PUCT daily, monthly, and quarterly reports on prices and congestion, abnormal bids and offers, and unusual market or operational behavior. Daily reports are due at the end of the following day, monthly reports are due at the end of the following month, quarterly reports are due at the end of the following quarter.**
- c. **Submit to the PUCT annual reports that assess the competitiveness of the market; identify market design flaws; assess the efficiency of ERCOT's management of the energy, ancillary capacity services, and congestion rights markets; evaluate the effectiveness of congestion management by ERCOT; evaluate whether there are inefficiencies, inappropriate incentives, flaws, or opportunities for manipulation in the market design; and recommend methods to correct any flaws and enhance the efficiency of the wholesale market. The final draft of this report will be submitted to the PUCT for review no later than May 15 each year, and will be published by May 30;**
- d. **Maintain a market oversight website to share market information with the public;**
- e. **Submit other reports as set forth in PUCT Rules or as otherwise requested by the PUCT and communicate regularly with PUCT staff;**
- f. **Provide expert advice, analysis, reports, and testimony services relating to the IMM's independent analysis, findings, and expertise as a part of the PUCT staff's case in enforcement proceedings initiated by the PUCT executive director;**
- g. **Coordinate enforcement activities between the Contractor and the PUCT, including identification of priorities, allocation of resources for investigations, and approval of investigations that require significant resources in excess of the work covered by the fixed fees under this contract;**
- h. **Obtain legal support to provide services to the PUCT for enforcement actions in select matters, as directed in writing by the PUCT, by at a minimum having a full-time employee licensed to practice law in the State of Texas;**
- i. **Inform the PUCT Oversight & Enforcement Director of any third-party inquiries concerning enforcement matters; and**
- j. **Contractor will be PUCT's agent and representative in the matters contemplated under this contract. Therefore, communications between the Contractor, PUCT Staff, ERCOT, and other client representatives of PUCT**

Staff made in anticipation of litigation or in furtherance of PUCT Staff's enforcement matters are privileged under the Texas Rules of Civil Procedure and the Texas Rules of Evidence. Contractor shall maintain confidentiality of all privileged communications.

II. Performance Benchmarks.

A. Documentation of IMM Activities. The IMM will assign internal identification numbers to all investigations, enforcement activities, and other projects and matters conducted by the IMM. The IMM will maintain a database of these activities and matters and will provide access by the Commission to such database.

B. Reporting. The IMM will provide a quarterly report to the Commission that addresses investigation and enforcement activities, as well as other projects conducted by the IMM. The report shall be provided in a timely fashion, but in no event later than one week after the end of the quarter. The report should be separated into two parts—one for investigation and enforcement activities and one for other IMM projects.

a. Investigation and Enforcement Activities Report. Every investigation or enforcement matter involving the IMM will be listed in this report. The report should include, at a minimum, the following information:

- Internal identification number;
- Name of investigation or enforcement activity;
- PUCT Docket number, if applicable;
- Description of the investigation or enforcement activity;
- Dates that an investigation is opened and closed;
- Key dates in the investigation or enforcement activity;
- Description of major activities performed in the investigation or enforcement action;
- A point of contact for each investigation and the members of the IMM team assigned to each activity.
- List of investigations that have been referred to the Commission during the period covered by that report; and
- Cumulative hours spent on investigation and enforcement activities per quarter.

b. Other Projects Report. All non-investigation related activities or projects will also be detailed in this report. The report should include, at a minimum, the following information:

- Internal identification number;
- Name of project;
- PUCT Docket number, if applicable;
- Description of the project;

- Dates that the project began and ended;
- Key dates in the project;
- Description of major activities performed in the project;
- A point of contact for each project and the members of the IMM team assigned to each project;
- Indicate whether the project is recurring or not; if non-recurring, provide the date by which such project must be accomplished; and
- Cumulative hours spent on other projects per quarter.

C. Monthly Meeting. IMM staff will meet on a monthly basis with the PUCT staff to review pending matters and issues relating to the IMM's duties under this contract.

D. Required Duties and Minimum Staffing Level. The IMM shall perform all of the duties specified herein. The IMM shall establish an office in space provided by ERCOT in its facility in Austin, Texas with a staff that is sufficient to carry out the day-to-day market monitoring functions and consult with PUCT staff on a regular basis. The Austin staff shall consist of at least eight persons who have technical and economic proficiency in the areas of electric generation and transmission, economics, information technology, law, and the analysis of complex transactions, including the interaction between the energy and financial markets. Such staffing for legal support will include a full time employee licensed to practice law in the State of Texas. The selection of the IMM Director and the mix of technical expertise prescribed for staffing IMM operations are subject to PUCT approval.

The IMM Director, Deputy Director, or designated liaison of the IMM shall be available as requested by the PUCT at the offices of the PUCT. The PUCT will provide appropriate office space, high-speed internet access, and a parking permit.

III. Responsibilities of ERCOT and PUCT

A. ERCOT Support.

- a. ERCOT will provide the Contractor with full access to ERCOT's operations centers and ERCOT's records, data, and other information concerning operations, settlement, and reliability.
- b. ERCOT will provide office and conference space at its Taylor, Texas facility or its Austin, Texas facility equipped with standard office furniture and equipment (fax, printer, and copier) and telephones (land lines), and high-speed internet access. Computers for use by the Contractor's staff located in the ERCOT facility will be provided by ERCOT; computers for use by staff working in other locations must be provided by the Contractor. In addition, the Contractor will have occasional access to other ERCOT conference rooms and copiers, as

needed.

- c. ERCOT will provide other support and cooperation necessary for the Contractor to perform its functions, including all support and cooperation which is determined appropriate by the PUCT.
- d. ERCOT will be PUCT's agent and representative in the matters contemplated under this contract. Therefore, communications between the Contractor, PUCT Staff, ERCOT, and other client representatives of PUCT Staff made in anticipation of litigation or in furtherance of PUCT Staff's enforcement matters are privileged under the Texas Rules of Civil Procedure and the Texas Rules of Evidence. ERCOT shall maintain confidentiality of all privileged communications.

B. PUCT Enforcement Support. The PUCT is responsible for enforcement activities and has a legal staff that will prosecute enforcement proceedings. The PUCT will also provide a liaison to the Contractor to coordinate on investigation and enforcement activities and evaluate whether enforcement is appropriate, based on reports provided by the Contractor. The PUCT will also provide staff to evaluate the penalties that are appropriate for violations of PUCT or market rules and testify on this matter.

C. PUCT Supervision.

- a. The Contractor activities will be subject to the supervision and oversight of the PUCT, but the IMM shall offer independent analysis to the Commission to assist in making judgments in the public interest.
- b. The PUCT may periodically review the performance of the Contractor under the Contract and this SOW to assess whether the Contractor is meeting the requirements of the Contract and providing diligent and professional services under the Contract. The PUCT shall provide the Contractor a written report of the conclusions it reaches in any such review. If, in the PUCT's sole judgment, the Contractor's performance has not been adequate, it may direct the Contractor to replace the IMM Director.

IV. Cost of Services

A. Fixed Fee Services. Contractor will perform Services for an annual Fixed Fee, paid in arrears, in monthly installments, according to the fixed fee schedule below. Such services will include all services provided under this Contract by the IMM Team located in Austin, per Section 19.8, and up to 50 hours per year of advice, consulting services, or other support from Dr. Patton.

If additional services not specified in Attachment A, Statement of Work, or additional IMM staff are requested and agreed to by the parties, the parties will execute separate Statements of Work describing the services and the total compensation for such services.

Contract Year	Dates	Total Annual Fixed Fee	Monthly Payment
Year 1	January 1, 2016 – December 31, 2016	\$3,500,000	\$291,667
Year 2	January 1, 2017 – December 31, 2017	\$3,600,000	\$300,000
Year 3	January 1, 2018 – December 31, 2018	\$3,700,000	\$308,333
Year 4	January 1, 2019 – December 31, 2019	\$3,800,000	\$316,667

B. Expenses

The fixed fee payments described above are Contractor's only compensation for the Services provided pursuant to this Statement of Work. Potomac shall also provide the initial documentation required under Section 2.2 E of Attachment B without additional compensation. If ERCOT finds Potomac's documentation and/or security measures to be insufficient, Potomac shall fix the deficiencies and ERCOT shall compensate Potomac Economics on a time and materials basis at the billing rates specified in Section 6.6 for costs incurred by Potomac Economics to comply with the requirements provided by ERCOT to satisfy Section 2.2 E of Attachment B. Prior to performing work to fix deficiencies identified by ERCOT, Potomac will submit a plan to address such deficiencies, along with estimated costs to PUCT and ERCOT for approval. Potomac shall not incur costs nor perform work to fix the identified security deficiencies until it receives ERCOT's and PUCT's written approval of the plan and estimated costs. No other expenses will be charged to or reimbursed by ERCOT or PUCT.

ATTACHMENT B
ERCOT Supplemental Terms

1. CONFIDENTIALITY

1.1 Exchange of Confidential Information

For the purposes of this Agreement, the Contractor and ERCOT will be exchanging certain Confidential Information, as defined below (i.e., the “Disclosing Party” provides Confidential Information to the “Receiving Party”). Notwithstanding anything herein to the contrary, this Confidentiality provision remains subject to the terms of Article 10. Public Information of Contract No. 473-16-0001 among Contractor, the PUCT, and ERCOT.

1.2 Confidential Information

A. “Confidential Information” is information that by its nature or purpose would reasonably be considered by a person to be confidential, proprietary, or trade secret information and specifically includes, but is not limited to, anything designated as Protected Information under the ERCOT Protocols. Confidential Information also includes all information, technical data, and know-how that relates to the business, services, or products of Disclosing Party, or Disclosing Party’s Market Participants (as defined below), customers, or other vendors, including without limitation, any research, products, services, developments, inventions, processes, techniques, designs, and scientific, technical, engineering, distribution, marketing, financial, merchandising, pricing, and sales information that is disclosed to Receiving Party directly or indirectly in writing, electronically, orally, by drawings, or through inspection. A “Market Participant” is an entity other than ERCOT that engages in any activity that is in whole or in part the subject of the ERCOT Nodal Protocols, regardless of whether it has signed an agreement with ERCOT, as further described in the ERCOT Nodal Protocols, which may be found on ERCOT’s website at www.ercot.com.

B. The Parties agree that all materials and information exchanged in connection with the performance of Services under this Agreement is considered Confidential Information.

C. Confidential Information does not include information, technical data, or know-how that:

1. is already published or available to the public, or subsequently becomes available, other than by a breach of this Agreement;

2. is received from a third party without Receiving Party’s knowledge of any obligation of confidentiality;

3. is independently developed by personnel or agents of Receiving Party without reliance on the Confidential Information;

4. is proven by written evidence to be known to Receiving Party at the time of disclosure; or

5. is produced by Receiving Party in compliance with an order, rule, or law of any federal, state, local, or municipal body having jurisdiction over a party, provided that Receiving Party gives Disclosing Party notice, to the extent reasonably possible, of such order, rule, or law and gives Disclosing Party an opportunity to defend and/or attempt to limit such production.

1.3 Precautions Taken to Protect Confidential Information

A. Receiving Party agrees not to disclose or use the Confidential Information for any purposes other than those under this Agreement.

B. Receiving Party will take reasonable actions and precautions to prevent unauthorized disclosure and use of Confidential Information, including maintaining possession and control at all times.

C. Receiving Party agrees to immediately notify Disclosing Party upon discovery of any unauthorized use or disclosure of Confidential Information, and to cooperate in any reasonable way to help Disclosing Party regain possession of the Confidential Information and prevent further unauthorized use or disclosure.

2. BACKGROUND INVESTIGATION AND CONDUCT

2.1 Background Investigation

A. Contractor must ensure that all individuals are legally authorized to perform the Services in the United States and Texas, and that the education and background on resumes submitted to ERCOT and/or PUCT for individuals are accurate.

B. Prior to any individual being allowed to have unescorted access to ERCOT's facilities or access to ERCOT computers or information systems ("Access Privileges"), such individual must successfully pass a background investigation, including:

1. a criminal background check, by a reputable vendor of consumer report services, covering the previous seven (7) years in each county, state, and country in which the individual has worked, lived, or attended school, showing no felonies and no misdemeanors except those misdemeanors that ERCOT accepts in writing;

2. verification of the individual's identity and confirming each individual's social security number by (a) a reputable vendor of consumer report services, (b) receipt of a properly-completed Form I-9, or (c) other reliable process acceptable to ERCOT; and

3. a clean, supervised drug screen to detect cocaine, amphetamines, opiates, phencyclidine, and marijuana, administered by a reputable medical office or drug testing service.

C. For each individual for whom Contractor requests Access Privileges, Contractor must:

1. arrange and pay for the above-referenced background investigation; and
2. provide written confirmation to ERCOT that the individual has successfully passed the requisite background investigation. For a period of three (3) years after the End Date of the applicable SOW, Contractor must maintain, and allow ERCOT or its authorized representative access to audit, Contractor's records relating to the background investigation of any individual.

D. All information regarding an individual obtained during the background check and drug screen will be considered Confidential Information.

2.2 Conduct

A. Contractor agrees that it and all individuals will abide by ERCOT's Code of Conduct and Ethics Corporate Standard ("Code of Conduct") and all policies and procedures applicable to ERCOT independent contractors while performing Services for ERCOT, on ERCOT premises, or using ERCOT equipment or networks.

B. Further, all individuals must execute the then-current Consultant Ethics Agreement (the "Ethics Agreement") acknowledging and agreeing to be bound by ERCOT's Antitrust Compliance, Confidentiality, Fraud Prevention and Whistleblower, and Acceptable Use Corporate Standards prior to being granted access privileges or beginning services for ERCOT. All individuals will execute such updated agreements as are reasonably requested by ERCOT.

C. The form of the current required Code of Conduct and Ethics Agreement may be found at www.ercot.com.

D. On-site Safety

1. Contractor is responsible for complying with all ERCOT safety precautions and programs in connection with the Services provided.

2. In providing the Services, Contractor must take all necessary precautions and provide all necessary protection from damage, injury, or loss to persons or property.

3. Contractor is liable for all damage or loss to any person or property to the extent caused by Contractor or an individual.

E. Secure Development

1. If applicable, prior to performing Services, Contractor will provide summary documentation of its secure product development life cycle, including the standards, practices, training programs, and development environment used to create or modify Deliverables. Contractor will document how the most critical application security weaknesses are being addressed.

2. During or after performance of Services or transfer of Deliverables, Contractor will immediately notify ERCOT of any identified security breaches involving Services and Deliverables provided to ERCOT. Within seven (7) calendar days of any such breach, Contractor will provide follow-up documentation to ERCOT that will include a description of the breach, potential security impact, root cause, and recommended corrective actions to be taken by ERCOT and Contractor.