PARTIES AND RECITAL PAGE(S)

Agreement between City of Chula Vista and TruStar Energy,

To Purchase and Install Compressed Natural Gas (CNG) Compressor

Recitals

WHEREAS, Contractor agrees to Purchase and Install Compressed Natural Gas (CNG) Compressor in accordance with the terms and conditions of City of Chula Request for Proposal RFP P01-13/14 and,

WHEREAS, Consultant warrants and represents that it is experienced and staffed in a manner such that it can deliver the services required of Consultant to City in accordance with the time frames and the terms and conditions of this Agreement.

OBLIGATORY PROVISIONS PAGES

NOW, THEREFORE, BE IT RESOLVED that the City and Consultant do hereby mutually agree as follows:

All of the Recitals above are incorporated into this Agreement by this reference.

ARTICLE I. CONSULTANT'S OBLIGATIONS

A. General

- 1. <u>General Duties</u>. Consultant shall perform all of the services described on Exhibit A, Paragraph 7 ("General Duties").
- 2. Scope of Work and Schedule. In performing and delivering the General Duties, Consultant shall also perform the services, and deliver to City the "Deliverables" described in Exhibit A, Paragraph 8, entitled "Scope of Work and Schedule," according to, and within the time frames set forth in Exhibit A, Paragraph 8, time being of the essence of this agreement. The General Duties and the work and Deliverables required in the Scope of Work and Schedule shall be referred to as the "Defined Services." Failure to complete the Defined Services by the times indicated does not, except at the option of the City, terminate this Agreement.
 - a. *Reductions in Scope of Work*. City may independently, or upon request from Consultant, from time to time, reduce the Defined Services to be performed by the Consultant under this Agreement. Upon doing so, City and Consultant agree to meet in good faith and confer for the purpose of negotiating a corresponding reduction in the compensation associated with the reduction.
 - b. Additional Services. In addition to performing the Defined Services, City may require Consultant to perform additional consulting services related to the Defined Services ("Additional Services"), and upon doing so in writing, if they are within the scope of services offered by Consultant, Consultant shall perform same on a time and materials basis at the rates set forth in the "Rate Schedule" in Exhibit A, Paragraph 10(C), unless a separate fixed fee is otherwise agreed upon. All compensation for Additional Services shall be paid monthly as billed.
- 3. <u>Standard of Care.</u> The Consultant expressly warrants that the work to be performed pursuant to this Agreement, whether Defined Services or Additional Services, shall be performed in accordance with the standard of care ordinarily exercised by members of the profession currently practicing under similar conditions and in similar locations.
 - a. No Waiver of Standard of Care. Where approval by City is required, it is understood to be conceptual approval only and does not relieve the Consultant of responsibility for complying with all laws, codes, industry standards, and liability for damages caused by negligent acts, errors, omissions, noncompliance with industry standards, or the willful misconduct of the Consultant or its subcontractors.

- B. Application of Laws. Should a federal or state law pre-empt a local law, or regulation, the Consultant must comply with the federal or state law and implementing regulations. No provision of this Agreement requires the Consultant to observe or enforce compliance with any provision, perform any other act, or do any other thing in contravention of federal, state, territorial, or local law, regulation, or ordinance. If compliance with any provision of this Agreement violates or would require the Consultant to violate any law, the Consultant agrees to notify City immediately in writing. Should this occur, the City and the Consultant agree that they will make appropriate arrangements to proceed with or, if necessary, amend or terminate this Agreement, or portions of it, expeditiously.
 - 1. <u>Subcontractors</u>. Consultant agrees to take appropriate measures necessary to ensure that all participants utilized by the Consultant to complete its obligations under this Agreement, such as subcontractors, comply with all applicable laws, regulations, ordinances, and policies, whether federal, state, or local, affecting Project implementation. In addition, if a subcontractor is expected to fulfill any responsibilities of the Consultant under this Agreement, the Consultant shall ensure that the subcontractor carries out the Consultant's responsibilities as set forth in this Agreement.

C. Insurance

- 1. General. Consultant must procure and maintain, during the period of performance of this Agreement, and for twelve months after completion, policies of insurance from insurance companies to protect against claims for injuries to persons or damages to property that may arise from or in connection with the performance of the work under this Agreement and the results of that work by the Consultant, his agents, representatives, employees or subcontractors, and provide documentation of same prior to commencement of work.
- 2. Minimum Scope of Insurance. Coverage must be at least as broad as:
 - a. *CGL*. Insurance Services Office Commercial General Liability coverage (occurrence Form CG0001).
 - b. *Auto*. Insurance Services Office Form Number CA 0001 covering Automobile Liability, Code 1 (any auto).
 - c. *WC*. Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.
 - d. *E&O*. Professional Liability or Errors & Omissions Liability insurance appropriate to the Consultant's profession. Architects' and Engineers' coverage is to be endorsed to include contractual liability.
- 3. <u>Minimum Limits of Insurance</u>. Consultant must maintain limits no less than those included in the table below:

i. General Liability:	\$1,000,000 per occurrence for bodily injury, personal injury,		
(Including	(including death), and property damage. If Commercial General		
operations,	Liability insurance with a general aggregate limit is used, either		
products and	the general aggregate limit must apply separately to this		
completed	Project/location or the general aggregate limit must be twice the		
operations, as	required occurrence limit.		
applicable)			
ii. Automobile	\$1,000,000 per accident for bodily injury, including death, and		
Liability:	property damage.		
iii. Workers'	Statutory		
Compensation	\$1,000,000 each accident		
Employer's	\$1,000,000 disease-policy limit		
Liability:	\$1,000,000 disease-each employee		
iv. Professional	\$1,000,000 each occurrence		
Liability or Errors			
& Omissions			
Liability:			

- 4. <u>Deductibles and Self-Insured Retentions</u>. Any deductibles or self-insured retentions must be declared to and approved by the City. At the option of the City, either the insurer will reduce or eliminate such deductibles or self-insured retentions as they pertain to the City, its officers, officials, employees and volunteers; or the Consultant will provide a financial guarantee satisfactory to the City guaranteeing payment of losses and related investigations, claim administration, and defense expenses.
- 5. Other Insurance Provisions. The general liability, automobile liability, and where appropriate, the worker's compensation policies are to contain, or be endorsed to contain, the following provisions:
 - a. Additional Insureds. City of Chula Vista, its officers, officials, employees, agents, and volunteers are to be named as additional insureds with respect to all policies of insurance, including those with respect to liability arising out of automobiles owned, leased, hired or borrowed by or on behalf of the Consultant, where applicable, and, with respect to liability arising out of work or operations performed by or on behalf of the Consultant, including providing materials, parts or equipment furnished in connection with such work or operations. The general liability additional insured coverage must be provided in the form of an endorsement to the Consultant's insurance using ISO CG 2010 (11/85) or its equivalent. Specifically, the endorsement must not exclude Products/Completed Operations coverage.
 - b. *Primary Insurance*. The Consultant's General Liability insurance coverage must be primary insurance as it pertains to the City, its officers, officials, employees, agents, and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees, or volunteers is wholly separate from the insurance of the

Consultant and in no way relieves the Consultant from its responsibility to provide insurance.

- c. Cancellation. The insurance policies required by this Agreement shall not be canceled by either party, except after thirty days' prior written notice to the City by certified mail, return receipt requested. The words "will endeavor" and "but failure to mail such notice shall impose no obligation or liability of any kind upon the company, its agents, or representatives" shall be deleted from all certificates.
- d. *Active Negligence*. Coverage shall not extend to any indemnity coverage for the active negligence of the additional insureds in any case where an agreement to indemnify the additional insured would be invalid under Subdivision (b) of Section 2782 of the Civil Code.
- e. *Waiver of Subrogation*. Consultant's insurer will provide a Waiver of Subrogation in favor of the City for each required policy providing coverage for the term required by this Agreement.
- 6. <u>Claims Forms.</u> If General Liability, Pollution and/or Asbestos Pollution Liability and/or Errors & Omissions coverage are written on a claims-made form:
 - a. *Retro Date*. The "Retro Date" must be shown, and must be before the date of the Agreement or the beginning of the work required by the Agreement.
 - b. *Maintenance and Evidence*. Insurance must be maintained and evidence of insurance must be provided for at least five years after completion of the work required by the Agreement.
 - c. *Cancellation*. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a "Retro Date" prior to the effective date of the Agreement, the Consultant must purchase "extended reporting" coverage for a minimum of five years after completion of the work required by the Agreement.
 - d. *Copies*. A copy of the claims reporting requirements must be submitted to the City for review.
- 7. Acceptability of Insurers. Insurance is to be placed with licensed insurers admitted to transact business in the State of California with a current A.M. Best's rating of no less than A V. If insurance is placed with a surplus lines insurer, insurer must be listed on the State of California List of Eligible Surplus Lines Insurers ("LESLI") with a current A.M. Best's rating of no less than A X. Exception may be made for the State Compensation Fund when not specifically rated.
- 8. <u>Verification of Coverage</u>. Consultant shall furnish the City with original certificates and amendatory endorsements effecting coverage required by Section I.C. of this Agreement. The endorsements should be on insurance industry forms, provided those endorsements

or policies conform to the requirements of this Agreement. All certificates and endorsements are to be received and approved by the City before work commences. The City reserves the right to require, at any time, complete, certified copies of all required insurance policies, including endorsements evidencing the coverage required by these specifications.

- 9. <u>Subcontractors</u>. Consultant must include all subconsultants as insureds under its policies or furnish separate certificates and endorsements for each subconsultant. All coverage for subconsultants is subject to all of the requirements included in these specifications.
- 10. <u>Not a Limitation of Other Obligations</u>. Insurance provisions under this Article shall not be construed to limit the Consultant's obligations under this Agreement, including Indemnity.

D. Security for Performance

- 1. Performance Bond. In the event that Exhibit A, at Paragraph 18, indicates the need for Consultant to provide a Performance Bond (indicated by a check mark in the parenthetical space immediately preceding the subparagraph entitled "Performance Bond"), then Consultant shall provide to the City a performance bond, in the amount indicated at Exhibit A, Paragraph 18, in the form prescribed by the City and by such sureties which are authorized to transact such business in the State of California, listed as the United States Department of Treasury http://www.fms.treas.gov/c570, and whose underwriting limitation is sufficient to issue bonds in the amount required by the Agreement, and which also satisfy the requirements stated in Section 995.660 of the Code of Civil Procedure, except as provided otherwise by laws or regulations. All bonds signed by an agent must be accompanied by a certified copy of such agent's authority to act. Surety companies must be duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds for the limits so required. Form must be satisfactory to the Risk Manager or City.
- 2. Letter of Credit. In the event that Exhibit A, at Paragraph 18, indicates the need for Consultant to provide a Letter of Credit (indicated by a check mark in the parenthetical space immediately preceding the subparagraph entitled "Letter of Credit"), then Consultant shall provide to the City an irrevocable letter of credit callable by the City at its unfettered discretion by submitting to the bank a letter, signed by the City Manager, stating that the Consultant is in breach of the terms of this Agreement. The letter of credit shall be issued by a bank, and be in a form and amount satisfactory to the Risk Manager or City Attorney which amount is indicated in the space adjacent to the term, "Letter of Credit," in Exhibit A, Paragraph 18.
- 3. Other Security. In the event that Exhibit A, at Paragraph 18, indicates the need for Consultant to provide security other than a Performance Bond or a Letter of Credit (indicated by a check mark in the parenthetical space immediately preceding the subparagraph entitled "Other Security"), then Consultant shall provide to the City such

other security therein listed in a form and amount satisfactory to the Risk Manager or City Attorney.

E. **Business License**. Consultant agrees to obtain a business license from the City and to otherwise comply with Title 5 of the Chula Vista Municipal Code.

ARTICLE II. CITY OBLIGATIONS

A. Consultation and Cooperation. City shall regularly consult the Consultant for the purpose of reviewing the progress of the Defined Services and Schedule, and to provide direction and guidance to achieve the objectives of this Agreement. The City shall allow Consultant access to its office facilities, files and records, as deemed necessary and appropriate by the City, throughout the term of this Agreement. In addition, City agrees to provide the materials identified at Exhibit A, Paragraph 9, with the understanding that delay in the provision of those materials beyond thirty days after authorization to proceed, shall constitute a basis for the justifiable delay in the Consultant's performance.

B. Compensation.

- 1. Following Receipt of Billing. Upon receipt of a properly prepared bill from Consultant, submitted to the City as indicated in Exhibit A, Paragraph 17, but in no event more frequently than monthly, on the day of the period indicated in Exhibit A, Paragraph 17, City shall compensate Consultant for all services rendered by Consultant according to the terms and conditions set forth in Exhibit A, Paragraph 10, adjacent to the governing compensation relationship indicated by a "checkmark" next to the appropriate arrangement, subject to the requirements for retention set forth in Paragraph 18 of Exhibit A, and shall compensate Consultant for out of pocket expenses as provided in Exhibit A, Paragraph 11.
- 2. <u>Supporting Information</u>. Any billing submitted by Consultant shall contain sufficient information as to the propriety of the billing, including properly executed payrolls, time records, invoices, contracts, or vouchers describing in detail the nature of the charges to the Project in order to permit the City to evaluate that the amount due and payable is proper, and such billing shall specifically contain the City's account number indicated on Exhibit A, Paragraph 17(C) to be charged upon making such payment.
- 3. <u>Exclusions</u>. In determining the amount of the compensation City will exclude any cost: 1) incurred prior to the effective date of this Agreement; or 2) arising out of or related to the errors, omissions, negligence or acts of willful misconduct of the Consultant, its agents, employees, or subcontractors.
 - a. *Errors and Omissions*. In the event that the City Administrator determines that the Consultant's negligence, errors, or omissions in the performance of work under this Agreement has resulted in expense to City greater than would have resulted if there were no such negligence, errors, omissions, Consultant shall

reimburse City for any additional expenses incurred by the City. Nothing in this paragraph is intended to limit City's rights under other provisions of this Agreement.

- 4. Payment Not Final Approval. The Consultant understands and agrees that payment to the Consultant for any Project cost does not constitute a City final decision about whether that cost is allowable and eligible for payment under the Project and does not constitute a waiver of any violation of Consultant of the terms of the Agreement. The Consultant acknowledges that City will not make a final determination about the eligibility of any cost until the final payment has been made on the Project or the results of an audit of the Project requested by the City has been completed, whichever occurs latest. If City determines that the Consultant is not entitled to receive any portion of the compensation due or paid, City will notify the Consultant in writing, stating its reasons. The Consultant agrees that Project closeout will not alter the Consultant's responsibility to return any funds due City as a result of later refunds, corrections, or other similar transactions; nor will Project closeout alter the right of City to disallow costs and recover funds provided for the Project on the basis of a later audit or other review.
 - a. Consultant's Obligation to Pay. Upon notification to the Consultant that specific amounts are owed to City, whether for excess payments or disallowed costs, the Consultant agrees to remit to City promptly the amounts owed, including applicable interest.

ARTICLE III. ETHICS

A. Financial Interests of Consultant

- 1. Consultant is Designated as an FPPC Filer. If Consultant is designated on Exhibit A, Paragraph 14, as an "FPPC filer," Consultant is deemed to be a "Consultant" for the purposes of the Political Reform Act conflict of interest and disclosure provisions, and shall report economic interests to the City Clerk on the required Statement of Economic Interests in such reporting categories as are specified in Paragraph 14 of Exhibit A, or if none are specified, then as determined by the City Attorney.
- 2. No Participation in Decision. Regardless of whether Consultant is designated as an FPPC Filer, Consultant shall not make, or participate in making or in any way attempt to use Consultant's position to influence a governmental decision in which Consultant knows or has reason to know Consultant has a financial interest other than the compensation promised by this Agreement.
- 3. Search to Determine Economic Interests. Regardless of whether Consultant is designated as an FPPC Filer, Consultant warrants and represents that Consultant has diligently conducted a search and inventory of Consultant's economic interests, as the term is used in the regulations promulgated by the Fair Political Practices Commission, and has determined that Consultant does not, to the best of Consultant's knowledge, have an economic interest which would conflict with Consultant's duties under this Agreement.

- 4. <u>Promise Not to Acquire Conflicting Interests</u>. Regardless of whether Consultant is designated as an FPPC Filer, Consultant further warrants and represents that Consultant will not acquire, obtain, or assume an economic interest during the term of this Agreement which would constitute a conflict of interest as prohibited by the Fair Political Practices Act.
- 5. <u>Duty to Advise of Conflicting Interests</u>. Regardless of whether Consultant is designated as an FPPC Filer, Consultant further warrants and represents that Consultant will immediately advise the City Attorney if Consultant learns of an economic interest of Consultant's that may result in a conflict of interest for the purpose of the Fair Political Practices Act, and regulations promulgated thereunder.
- 6. <u>Specific Warranties Against Economic Interests</u>. Consultant warrants, represents and agrees that:
 - a. Neither Consultant, nor Consultant's immediate family members, nor Consultant's employees or agents ("Consultant Associates") presently have any interest, directly or indirectly, whatsoever in any property which may be the subject matter of the Defined Services, or in any property within 2 radial miles from the exterior boundaries of any property which may be the subject matter of the Defined Services, ("Prohibited Interest"), other than as listed in Exhibit A, Paragraph 14.
 - b. No promise of future employment, remuneration, consideration, gratuity or other reward or gain has been made to Consultant or Consultant Associates in connection with Consultant's performance of this Agreement. Consultant promises to advise City of any such promise that may be made during the Term of this Agreement, or for twelve months thereafter.
 - c. Consultant Associates shall not acquire any such Prohibited Interest within the Term of this Agreement, or for twelve months after the expiration of this Agreement, except with the written permission of City.
 - d. Consultant may not conduct or solicit any business for any party to this Agreement, or for any third party that may be in conflict with Consultant's responsibilities under this Agreement, except with the written permission of City.

IV. LIQUIDATED DAMAGES

- A. **Application of Section**. The provisions of this section apply if a Liquidated Damages Rate is provided in Exhibit A, Paragraph 13.
 - 1. <u>Estimating Damages</u>. It is acknowledged by both parties that time is of the essence in the completion of this Agreement. It is difficult to estimate the amount of damages resulting from delay in performance. The parties have used their judgment to arrive at a reasonable amount to compensate for delay.

- 2. <u>Amount of Penalty</u>. Failure to complete the Defined Services within the allotted time period specified in this Agreement shall result in the following penalty: For each consecutive calendar day in excess of the time specified for the completion of the respective work assignment or Deliverable, the Consultant shall pay to the City, or have withheld from monies due, the sum of Liquidated Damages Rate provided in Exhibit A, Paragraph 13 ("Liquidated Damages Rate").
- 3. Request for Extension of Time. If the performance of any act required of Consultant is directly prevented or delayed by reason of strikes, lockouts, labor disputes, unusual governmental delays, acts of God, fire, floods, epidemics, freight embargoes, or other causes beyond the reasonable control of the Consultant, as determined by the City, Consultant shall be excused from performing that act for the period of time equal to the period of time of the prevention or delay. In the event Consultant claims the existence of such a delay, the Consultant shall notify the City's Contract Administrator, or designee, in writing of that fact within ten calendar days after the beginning of any such claimed delay. Extensions of time will not be granted for delays to minor portions of work unless it can be shown that such delays did or will delay the progress of the work.

ARTICLE V. INDEMNIFICATION

A. Defense, Indemnity, and Hold Harmless.

- 1. General Requirement. Except for liability for Design Professional Services covered under Article V., Section A.2. Consultant shall defend, indemnify, protect and hold harmless the City, its elected and appointed officers, agents and employees, from and against any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury, in law or equity, to property or persons, including wrongful death, in any manner arising out of or incident to any alleged acts, omissions, negligence, or willful misconduct of Consultant, its officials, officers, employees, agents, and contractors, arising out of or in connection with the performance of the Defined Services or this Agreement. This indemnity provision does not include any claims, damages, liability, costs and expenses (including without limitations, attorneys fees) arising from the sole negligence, active negligence or willful misconduct of the City, its officers, employees. Also covered is liability arising from, connected with, caused by or claimed to be caused by the active or passive negligent acts or omissions of the City, its agents, officers, or employees which may be in combination with the active or passive negligent acts or omissions of the Consultant, its employees, agents or officers, or any third party.
- 2. <u>Design Professional Services</u>. If Consultant provides design professional services, as defined by California Civil Code section 2782.5, as may be amended from time to time, Consultant shall defend, indemnify and hold the City, its officials, officers, employees, volunteers, and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury, in law or equity, to property or persons, including wrongful death, in any manner arising out of, pertaining to, or relating to the negligence, recklessness, or willful misconduct of Consultant, its officials, officers,

employees, agents, consultants, and contractors arising out of or in connection with the performance of Consultant's services. Consultant's duty to defend, indemnify, and hold harmless shall not include any claims or liabilities arising from the sole negligence, active negligence or willful misconduct of the City, its agents, officers or employees. This section in no way alters, affects or modifies the Consultant's obligations and duties under this Agreement.

- 3. Costs of Defense and Award. Included in the obligations in Sections A.1 and A.2, above, is the Consultant's obligation to defend, at Consultant's own cost, expense and risk, any and all suits, actions or other legal proceedings, that may be brought or instituted against the City, its directors, officials, officers, employees, agents and/or volunteers, subject to the limitations in Sections A.1. and A.2. Consultant shall pay and satisfy any judgment, award or decree that may be rendered against City or its directors, officials, officers, employees, agents and/or volunteers, for any and all related legal expenses and costs incurred by each of them, subject to the limitations in Sections A.1. and A.2.
- 4. <u>Insurance Proceeds</u>. Consultant's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by the City, its directors, officials, officers, employees, agents, and/or volunteers.
- 5. <u>Declarations</u>. Consultant's obligations under Article V shall not be limited by any prior or subsequent declaration by the Consultant.
- 6. <u>Enforcement Costs</u>. Consultant agrees to pay any and all costs City incurs enforcing the indemnity and defense provisions set forth in Article V.
- 7. <u>Survival</u>. Consultant's obligations under Article V shall survive the termination of this Agreement.

ARTICLE VI. TERMINATION OF AGREEMENT

- A. **Termination for Cause**. If, through any cause, Consultant shall fail to fulfill in a timely and proper manner Consultant's obligations under this Agreement, or if Consultant shall violate any of the covenants, agreements or stipulations of this Agreement, City shall have the right to terminate this Agreement by giving written notice to Consultant of such termination and specifying the effective date thereof at least five (5) days before the effective date of such termination. In that event, all finished or unfinished documents, data, studies, surveys, drawings, maps, reports and other materials prepared by Consultant shall, at the option of the City, become the property of the City, and Consultant shall be entitled to receive just and equitable compensation, in an amount not to exceed that payable under this Agreement and less any damages caused City by Consultant's breach, for any work satisfactorily completed on such documents and other materials up to the effective date of Notice of Termination,.
- B. **Termination of Agreement for Convenience of City**. City may terminate this Agreement at any time and for any reason, by giving specific written notice to Consultant of such termination and specifying the effective date thereof, at least thirty (30) days before the

effective date of such termination. In that event, all finished and unfinished documents and other materials described hereinabove shall, at the option of the City, become City's sole and exclusive property. If the Agreement is terminated by City as provided in this paragraph, Consultant shall be entitled to receive just and equitable compensation, in an amount not to exceed that payable under this Agreement, for any satisfactory work completed on such documents and other materials prior to the effective date of such termination. Consultant hereby expressly waives any and all claims for damages or compensation arising under this Agreement except as set forth in this section.

ARTICLE VII. RECORD RETENTION AND ACCESS

- A. **Record Retention**. During the course of the Project and for three (3) years following completion, the Consultant agrees and to maintain, intact and readily accessible, all data, documents, reports, records, contracts, and supporting materials relating to the Project as City may require.
- B. Access to Records of Consultant and Subcontractors. The Consultant agrees to permit, and require its subcontractors to permit City or its authorized representatives, upon request, to inspect all Project work, materials, payrolls, and other data, and to audit the books, records, and accounts of the Contractor and its subcontractors pertaining to the Project.
- C. **Project Closeout**. The Consultant agrees that Project closeout does not alter the reporting and record retention requirements of this Agreement.

ARTICLE VIII. PROJECT COMPLETION, AUDIT, AND CLOSEOUT

- A. **Project Completion**. Within ninety (90) calendar days following Project completion or termination by City, Consultant agrees to submit a final certification of Project expenses and audit reports, as applicable.
- B. **Audit of Consultants**. Consultant agrees to perform financial and compliance audits the City may require. The Consultant also agrees to obtain any other audits required by City. Consultant agrees that Project closeout will not alter Consultant's audit responsibilities. Audit costs are allowable Project costs.
- C. **Project Closeout**. Project closeout occurs when City notifies the Consultant that City has closed the Project, and either forwards the final payment or acknowledges that the Consultant has remitted the proper refund. The Consultant agrees that Project closeout by City does not invalidate any continuing requirements imposed by the Agreement or any unmet requirements set forth in a written notification from City

ARTICLE IX. MISCELLANEOUS PROVISIONS

A. **Assignability**. The services of Consultant are personal to the City, and Consultant shall not assign any interest in this Agreement, and shall not transfer any interest in the same (whether by assignment or notation), without prior written consent of City.

- 1. <u>Limited Consent</u>. City hereby consents to the assignment of the portions of the Defined Services identified in Exhibit A, Paragraph 16 to the subconsultants identified as "Permitted Subconsultants".
- B. Ownership, Publication, Reproduction and Use of Material. All reports, studies, information, data, statistics, forms, designs, plans, procedures, systems and any other materials or properties produced under this Agreement shall be the sole and exclusive property of City. No such materials or properties produced in whole or in part under this Agreement shall be subject to private use, copyrights or patent rights by Consultant in the United States or in any other country without the express written consent of City. City shall have unrestricted authority to publish, disclose (except as may be limited by the provisions of the Public Records Act), distribute, and otherwise use, copyright or patent, in whole or in part, any such reports, studies, data, statistics, forms or other materials or properties produced under this Agreement.
- C. **Independent Contractor**. City is interested only in the results obtained and Consultant shall perform as an independent contractor with sole control of the manner and means of performing the services required under this Agreement. City maintains the right only to reject or accept Consultant's work products. Consultant and any of the Consultant's agents, employees or representatives are, for all purposes under this Agreement, independent contractors and shall not be deemed to be employees of City, and none of them shall be entitled to any benefits to which City employees are entitled including but not limited to, overtime, retirement benefits, worker's compensation benefits, injury leave or other leave benefits. Therefore, City will not withhold state or federal income tax, social security tax or any other payroll tax, and Consultant shall be solely responsible for the payment of same and shall hold the City harmless with regard to them.
 - 1. Actions on Behalf of City. Except as City may specify in writing, Consultant shall have no authority, express or implied, to act on behalf of City in any capacity whatsoever, as an agent or otherwise. Consultant shall have no authority, express or implied, to bind City or its members, agents, or employees, to any obligation whatsoever, unless expressly provided in this Agreement.
 - 2. <u>No Obligations to Third Parties</u>. In connection with the Project, Consultant agrees and shall require that it's agents, employees, subcontractors agree that City shall not be responsible for any obligations or liabilities to any third party, including its agents, employees, subcontractors, or other person or entity that is not a party to this Agreement. Notwithstanding that City may have concurred in or approved any solicitation, subagreement, or third party contract at any tier, City shall have no obligation or liability to any person or entity not a party to this Agreement.
- D. Administrative Claims Requirements and Procedures. No suit or arbitration shall be brought arising out of this Agreement, against City unless a claim has first been presented in writing and filed with City and acted upon by City in accordance with the procedures set forth in Chapter 1.34 of the Chula Vista Municipal Code, as same may from time to time be

amended, the provisions of which are incorporated by this reference as if fully set forth herein, and such policies and procedures used by City in the implementation of same. Upon request by City, Consultant shall meet and confer in good faith with City for the purpose of resolving any dispute over the terms of this Agreement.

- E. **Administration of Contract**. Each party designates the individuals ("Contract Administrators") indicated on Exhibit A, Paragraph 12, as that party's contract administrator who is authorized by the party to represent it in the routine administration of this Agreement.
- F. **Term**. This Agreement shall terminate when the parties have complied with all executory provisions hereof.
- G. **Attorney's Fees**. Should a dispute arising out of this Agreement result in litigation, it is agreed that the prevailing party shall be entitled to a judgment against the other for an amount equal to reasonable attorneys' fees and court costs incurred. The "prevailing party" shall be deemed to be the party who is awarded substantially the relief sought.
- H. **Statement of Costs**. In the event that Consultant prepares a report or document, or participates in the preparation of a report or document in performing the Defined Services, Consultant shall include, or cause the inclusion of, in the report or document, a statement of the numbers and cost in dollar amounts of all contracts and subcontracts relating to the preparation of the report or document.
- I. Consultant is Real Estate Broker and/or Salesman. If the box on Exhibit A, Paragraph 15 is marked, the Consultant and/or is principals is/are licensed with the State of California or some other state as a real estate broker or salesperson. Otherwise, Consultant represents that neither Consultant, nor its principals are licensed real estate brokers or salespersons.
- J. **Notices**. All notices, demands or requests provided for or permitted to be given pursuant to this Agreement must be in writing. All notices, demands and requests to be sent to any party shall be deemed to have been properly given or served if personally served or deposited in the United States mail, addressed to such party, postage prepaid, registered or certified, with return receipt requested, at the addresses identified in this Agreement as the places of business for each of the designated parties.
- K. **Integration**. This Agreement, together with any other written document referred to or contemplated in it, embody the entire Agreement and understanding between the parties relating to the subject matter hereof. Neither this Agreement nor any provision of it may be amended, modified, waived or discharged except by an instrument in writing executed by the party against which enforcement of such amendment, waiver or discharge is sought.
- L. Capacity of Parties. Each signatory and party to this Agreement warrants and represents to the other party that it has legal authority and capacity and direction from its principal to enter into this Agreement, and that all necessary resolutions or other actions have been taken so as to enable it to enter into this Agreement.

M. Governing Law/Venue. This Agreement shall be governed by and construed in accordance with the laws of the State of California. Any action arising under or relating to this Agreement shall be brought only in the federal or state courts located in San Diego County, State of California, and if applicable, the City of Chula Vista, or as close thereto as possible. Venue for this Agreement, and performance under it, shall be the City of Chula Vista.

(End of page. Next page is signature page.)



Signature Page

to

Agreement between City of Chula Vista and TruStar Energy

To Purchase and Install Compressed Natural Gas (CNG) Compressor

IN WITNESS WHEREOF, City and Contractor have executed this Agreement, indicating that they have read and understood same, and indicate their full and complete consent to its terms:

Dated:	City of Chula Vista
	By:Cheryl Cox Mayor City of Chula Vista
Attest:	
Donna Norris, City Clerk	
Approved as to form:	
Glen Googins, City Attorney	
Dated:	TruStar Energy
	By:
	Jeff Lucero
	Vice President, Construction

Ex	chibit List to Agreement (X) Exhibit A.
	Exhibit A to Agreement between City of Chula Vista And TruStar Energy
1. 2.	Effective Date of Agreement: January 28, 2014 City-Related Entity:
	(x) City of Chula Vista, a municipal chartered corporation of the State of California
	() Redevelopment Agency of the City of Chula Vista, a political subdivision of the State of California
	() Industrial Development Authority of the City of Chula Vista, a
(" (() Other:, a [insert business form]
3.	Place of Business for City: City of Chula Vista 1800 Maxwell Road Chula Vista, CA 91911
	4. Consultant: TruStar Energy 7970 Cherry Avenue, Suite 301 Fontana, CA 92336
5.	Business Form of Consultant:
	() Sole Proprietorship() Partnership(X) Corporation

6. Place of Business, Telephone and Fax Number of Consultant:

909-217-0990

7. General Duties:

Purchase and install natural gas compressor for the CNG station at the City of Chula Vista's Public Works Center. These services will include all necessary equipment, material and testing as required by the manufacturer to insure the performance of the equipment.

8. Scope of Work and Schedule:

See Attachment 1 to Exhibit A

- 9. Materials Required to be Supplied by City to Consultant: N/A
- 10. Compensation:
 - A. (X) Single Fixed Fee Arrangement.

For performance of all of the Defined Services by Consultant as herein required, City shall pay a single fixed fee in the amounts and at the times or milestones or for the Deliverables set forth below:

Single Fixed Fee Amount:	\$228,359.77	, payable as follows
Milestone or Event or Deliverable	e	Amount or Percent of Fixed Fee

() 1. Interim Monthly Advances. The City shall make interim monthly advances against the compensation due for each phase on a percentage of completion basis for each given phase such that, at the end of each phase only the compensation for that phase has been paid. Any payments made hereunder shall be considered as interest free loans that must be returned to the City if the Phase is not satisfactorily completed. If the Phase is satisfactorily completed, the City shall receive credit against the compensation due for that phase. The retention amount or percentage set forth in Paragraph 18 is to be applied to each interim payment such that, at the end of the phase, the full retention has been held back from the compensation due for that phase. Percentage of completion of a phase shall be assessed in the sole and unfettered discretion by the Contracts Administrator designated herein by the City, or such other person as the City Manager shall designate, but only upon such proof demanded by the City that has been provided, but in no event shall such interim advance payment be made unless the Contractor shall have represented in writing that said percentage of completion of the phase has been performed by the Contractor.

The practice of making interim monthly advances shall not convert this agreement to a time and materials basis of payment.

B. (X) Phased Fixed Fee Arrangement.

For the performance of each phase or portion of the Defined Services by Consultant as are separately identified below, City shall pay the fixed fee associated with each phase of Services, in the amounts and at the times or milestones or Deliverables set forth. Consultant shall not commence Services under any Phase, and shall not be entitled to the compensation for a Phase, unless City shall have issued a notice to proceed to Consultant as to said Phase.

Phase Fee for Said Phase

1. Full Payment After Completion \$____\$228,359.77

- () 1. Interim Monthly Advances. The City shall make interim monthly advances against the compensation due for each phase on a percentage of completion basis for each given phase such that, at the end of each phase only the compensation for that phase has been paid. Any payments made hereunder shall be considered as interest free loans that must be returned to the City if the Phase is not satisfactorily completed. If the Phase is satisfactorily completed, the City shall receive credit against the compensation due for that phase. The retention amount or percentage set forth in Paragraph 18 is to be applied to each interim payment such that, at the end of the phase, the full retention has been held back from the compensation due for that phase. Percentage of completion of a phase shall be assessed in the sole and unfettered discretion by the Contracts Administrator designated herein by the City, or such other person as the City Manager shall designate, but only upon such proof demanded by the City that has been provided, but in no event shall such interim advance payment be made unless the Contractor shall have represented in writing that said percentage of completion of the phase has been performed by the Contractor. The practice of making interim monthly advances shall not convert this agreement to a time and materials basis of payment.
- C. () Monthly Rate/Hourly Rate Arrangement per bid:

Contract Base Year: Per Month Rate:

For performance of the Defined Services by Contractor as herein required, City shall pay Contractor for the productive hours of time spent by Consultant in the performance of said Services, at the rates or amounts set forth in the Rate Schedule herein below according to the following terms and conditions:

(1) (X) Not-to-Exceed Limitation on Time and Materials Arrangement					
Notwithstanding the expenditure by Consultant of time and materials in excess of sai Maximum Compensation amount, Consultant agrees that Consultant will perform all of the Defined Services herein required of Consultant for \$_228,359.77_ including all Materials, and other "reimbursables" ("Maximum Compensation").					
(2) () Limitation without Further Authorization on Time and Materials Arrangement					
At such time as Consultant shall have incurred time and masses any additional compensation without further authorization issued approved by the City. Nothing herein shall preclude Consultant from proservices at Consultant's own cost and expense. See Exhibit B for wage 1 () Hourly rates may increase by 6% for services rendered after if deservices is caused by City. (3) () Additional Services Rates: Contractor shall perform Additional through the maintenance inspection with prior City consent. See chart and	all not be entitled d in writing and eviding additional rates. elay in providing d work identified				
11. Materials Reimbursement Arrangement					
For the cost of out of pocket expenses incurred by Consultant in the perform herein required, City shall pay Consultant at the rates or amounts set forth below					
(X) None, the compensation includes all costs.					
	Cost or Rate				
() Reports, not to exceed \$:	\$				
() Copies, not to exceed \$:	\$				
() Travel, not to exceed \$:	\$				
() Printing, not to exceed \$:	\$				
() Postage, not to exceed \$:	\$				
() Delivery, not to exceed \$:	\$				
() Outside Services:	\$				
() Other Actual Identifiable Direct Costs:	\$				
, not to exceed \$:	\$				
, not to exceed \$:	\$				

12. Contract Administrators:

City: Andy Trujillo Transit CVT Transit Manager

Consultant: Jeff Lucero V.P. Construction TruStar Energy 909-793-3700 13. Liquidated Damages Rate: () \$ per day. (X) Other: Per Scope of Work, Attachment 1 "Liquidated Damages for Construction Delays" 14. Statement of Economic Interests, Consultant Reporting Categories, per Conflict of Interest Code (Chula Vista Municipal Code chapter 2.02): (X) Not Applicable. Not an FPPC Filer. () FPPC Filer () Category No. 1. Investments, sources of income and business interests. () Category No. 2. Interests in real property. () Category No. 3. Investments, business positions, interests in real property, and sources of income subject to the regulatory, permit or licensing authority of the department administering this Agreement. () Category No. 4. Investments and business positions in business entities and sources of income that engage in land development, construction or the acquisition or sale of real property. () Category No. 5. Investments and business positions in business entities and sources of income that, within the past two years, have contracted with the City of Chula Vista or the City's Redevelopment Agency to provide services, supplies, materials, machinery or equipment. () Category No. 6. Investments and business positions in business entities and sources of income that, within the past two years, have contracted with the department administering this Agreement to provide services, supplies, materials, machinery or equipment.

Tel: 619-397-6061

) List "Consultant Associates" interests in real property within 2 radial miles of Project Property, if any:		
15. () Consultant is Real Estate Broker and/or Salesman		
16. Permitted Subconsultants: None		
17. Bill Processing A. Consultant's billing to be submitted for the following period of time:		
() Monthly () Quarterly () Other:		
B. Day of the Period for submission of Consultant's Billing:		
 () First of the Month () 15th Day of each Month () End of the Month (X) Other: <u>After Completion</u> C. City's Account Number: <u>40300</u>		
18. Security for Performance		
() Performance Bond, \$		
Amount: \$ () Retention. If this space is checked, then notwithstanding other provisions to the contrary requiring the payment of compensation to the Consultant sooner, the City shall be entitle to retain, at their option, either the following "Retention Percentage" or "Retention Amount" until the City determines that the Retention Release Event, listed below, has occurred:		
() Retention Percentage:%		

() Retention Amount: \$	
Retention Release Event:	
• / •	
() Other:	
Retention Release Event:	

1. Bill Processing:

Payments are made to the contractor on a monthly basis. Each payment period is from second Friday to second Friday, with a thirty (30) day processing period.

Scope of Work

Attachment 1

Purchase and Replacement

Of Chula Vista CNG Compressor

Proposed work:

1. Remove existing compressor, purchase and install new CNG two-throw Ariel compressor per the minimum specification on Attachment 1a.

General Construction Requirements (As Applicable)

- Application. These construction requirements shall apply to all capital construction work performed by the Contractor during the term of the contract. This includes alternate work described in the project requirements, as well as any elective work implemented by the Contractor at its discretion and any other modifications made in the future under the direction of the City.
- **Design-Build.** Work shall be developed on a design-build basis, where the Contractor shall prepare the construction drawings per these requirements and per the City approval and then construct the specified system per the Contractor's approved drawings.
- **Trench Work.** Open trenches shall be protected from personnel traffic and shall be covered with steel plates suitable for heavy-vehicle traffic, unless open trenches are blocked to through traffic, and approved in advance by the City.
- Concrete Demolition and Repair. All concrete pavement that is excavated shall be saw cut in neat and straight lines. Repairs shall be made to match pre-demolition conditions and documented by photographs. Contractor shall repair concrete excavation with depth to match adjacent paving, steel dowels and other design details as approved by the City. Contractor shall warrant all concrete repairs, patches and trenches for the duration of the Contract.
- Operations Disruption. During removal and installation, the Contractor shall communicate with the City to minimize disruptions and interference with the on-going operation of the various Public Works' Divisions. An effort by the contractor shall be made to keep the compressor not being replaced operational during the duration of the project.
- **New Equipment.** All equipment furnished by the Contractor for the systems shall be new, unless otherwise specified or allowed in writing by the City.

- **Seismic Design.** All new or modified equipment, foundations and supports and shall be suitable for Seismic Zone IV.
- **Manufacturer-Rated Pressures.** All new components downstream of compressor discharge shall have a maximum allowable working pressure of at least 5000 PSIG, except for the CT-5000 nozzles, and design safety factors in compliance with ANSI/ASME B31.3.
- **Gas Velocities.** New or modified piping systems shall be designed to generate a gas velocity of less than 50 ft. per second at 80% of the normal operating pressure for a given piping system or segment, unless a higher velocity is specified or allowed in writing by the City.
- Piping Corrosion Protection. Any buried steel pipe not continuously protected by PE sleeve or duct shall be protected by an engineered cathodic protection system. The system shall include factory-applied pipe coating, sacrificial anodes and test stations. The cathodic protection system shall include test stations at each anode and be designed by a California-registered engineer, experienced in the field of cathodic protection. Piping not buried shall be painted with industrial-grade paint suitable for all-weather exposure and for the temperatures to which it will be exposed.
- **Grounding.** All new equipment shall be grounded and bonded using copper grounding anodes and bonded using 2/0 stranded BCW.
- **Signage.** Provide and maintain all safety and warning signs as required by NFPA 52 for the new compressor. Signs shall be constructed of UV-resistant all-weather material.

Drawings and Information.

1.1.1.1 **General.** For all construction and capital-improvement work procured by the City, Contractor shall provide construction drawings with the following information, as required for the work and as applicable:

Civil, structural and foundation designs, including supporting calculations.

Equipment plan, including bill of materials.

Piping plan, including bill of materials.

Piping and instrumentation diagram/mechanical flow schematic.

Electrical one-line diagram, with load schedules, panel schedules and supporting calculations.

Electrical plan, including conduit, cable and trench schedules, as well as bill of materials.

Hazardous area and equipment ground-bonding plan.

Cathodic protection of buried pipe with test stations.

Safety and warning sign plan.

- Actual schedule of drawings is subject to concurrence by the City and approval by jurisdictions having authority.
- 1.1.1.2. **Drawing Format.** Drawing format, including borders, title blocks, etc., shall be coordinated under the City's direction. Drawings shall show existing systems on drawings in gray-screened color and new work in 100% black color as applicable.
- 1.1.1.3. Requirements and Approvals. A California-licensed professional engineer shall seal all drawings with specialty that is appropriate for each drawing. The City of Chula Vista Fire Department, Building Services, and other jurisdictions having authority shall approve drawings for construction.
- 1.1.1.4. As-Built Drawings. Contractor shall provide the City with a complete set of as-built drawings of the Facility within 28 days following acceptance of the Facility as being complete by the City. As-built drawings shall be reviewed by the City and shall reflect the design of the Facility at the time of final acceptance and a California-licensed Professional Engineer shall stamp each drawing. The as-built drawings shall be submitted electronically in AutoCAD 2006 format, as well as (2) complete printed sets in "D"-size sheets. Any modifications to the Facility made by the Contractor during the term of the O&M services, either at its own direction or under direction from the City, shall also be subsequently documented on as-built drawings within 2 weeks of completion of such work.
 - **Geotechnical Conditions.** Engineered and approved design for structural foundations of the vessel upgrade required at CV, including consideration of geotechnical conditions, are provided as part of the drawings for that work. Geotechnical reports and recommendations for any structural foundations beyond that work shall be the responsibility of the Contractor.
 - **Sound Emissions.** Any new equipment beyond that required under article 1.3 that is provided and operated by the Contractor shall be designed to minimize sound emissions, including the use of low-speed fans, sound-attenuated louvers, high-efficiency enclosure construction and hospital-grade muffler for genset as applicable.

Operating and Maintenance (O&M) Manuals.

1.1.1.5. General. This section applies to any new or substantially modified equipment or system at any of the CNG facilities, including improvements that are required by the City, and other improvements desired by the Contractor. Contractor shall provide the City with (3) identical bound sets of O&M manuals for the new or changed equipment, including repair, maintenance and parts bulletins for all major components and systems,

- such as vessels, compressors, gas dryer, motors and motor starters, actuated valves, PLC, filters, dispensers and hoses, air compressor, and instrument air dryer. Include recommended spare parts list (RSPL) for all listed components. The O&M manual shall also be provided in PDF format on CDR, including content and organization that matches the bound set. PDF shall include a text-searchable index that is subject to approval by the City 60 days prior to planned Facility startup.
- 1.1.1.6. **Summary Manufacturer Data.** Include listing of manufacturers and serial numbers for all compressor frames and cylinders, compressor skids, gas dryer, buffer vessels, and dispensers.
- 1.1.1.7. Updates. During the contract term, the Contractor shall provide the City with incremental Maintenance-manual updates for any equipment or components that are replaced or added and that are not listed in the original manuals, with updated content provided in both bound and textsearchable PDF/CDR formats.
- **Proprietary Hardware and Software.** Systems and equipment provided the Contractor shall not include any proprietary or 'sole source' hardware or software, unless the City so provides permission to do in advance and in writing.
- 1.2 Time for Construction of Base and Alternate Improvements.

 Contractor shall complete the work required as elected by the City, following receipt of NTP from the City, including compliance with any throughput-performance testing. Calendar-day allowances for each improvement are as follows:
 - Install new compressor at CV: 180 days.
- **Delays.** In case the Contractor can demonstrate delays in completion that are beyond the reasonable control of the Contractor, the City, at its discretion, may extend the allowed time for completion.
- Liquidated Damages for Construction Delays. The Contractor shall pay to the City as liquidated damages, \$250.00 per calendar day per listed work element required to achieve substantial completion beyond the dates stated in article 1.2 above, and any authorized extension thereof, for the first thirty (30) days. If the Contractor is delayed in completing the Work by reason of any change made by the City, the time for completion of the Work may be extended by a period commensurate with such delay, without additional compensation. In such case, Contractor shall not be subject to liquidated damages for the extension. No extension of time will be granted for Change Orders that, in the opinion of the City, do not affect the critical path of project completion.

Applicable Codes and Standards

- 1.3 General. The design and construction of the Facility shall be subject to the codes, regulations and requirements listed below, as adopted by local jurisdictions and the City. It is the Contractor's responsibility to identify all applicable jurisdictions, applicable editions and codes. Compliance with codes or standards that come into force or are modified following commencement of this Contract shall be the responsibility of the Contractor, subject to negotiation with the City over any additional costs to the Contractor required to meet compliance. The Contractor shall make all required filings for certifications, permits and licenses, and pay all related fees.
- 1.4 National Fire Protection Association (NFPA).

NFPA 52: Compressed Natural Gas (CNG) Vehicular Fuel Systems Code (2006).

NFPA 70: National Electric Code with City of San Diego amendments.

- 1.5 Uniform Building Code with City of San Diego amendments.
- 1.6 Uniform Fire Code with City of San Diego amendments.

UFC 5201.

UFC 5204.

- 1.7 California Title 8: Safety Orders for Unfired Pressure Vessels.
- 1.8 Occupational Safety and Health Act (work area sound-level limits).
- 1.9 ANSI/ASME B31.3-2002 Process Piping.
- 1.10 American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, 2004 Edition.

Section V: Nondestructive Examination.

Section VIII: Pressure Vessels - Division 1.

Section VIII: Pressure Vessels - Division 2 – Alternative Rules.

- 1.11 American Society for Testing and Materials (ASTM).
- 1.12 American Welding Society (AWS) D1.1-88: Structural Welding Code Steel.
- 1.13 International Standards Organization (ISO) 12944-5:1998 Paints and varnishes -- Corrosion protection of steel structures by protective paint systems -- Part 5: Protective paint systems.

1.14 National Electrical Manufacturers Association (NEMA) NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum).

New CNG Compressor

- **General.** Compressor gas shall be fed from the existing gas dryer. If requires provide new or modified suction piping to feed the new compressor. Gas-velocity shall be calculated based on an MSA-supply pressure of 55 PSIG and the two compressors running at full load simultaneously. Provide controls and piping that will allow the two compressors to run and discharge CNG to the dispensing system simultaneously.
- **Area of Work.** Compressor shall be located within the existing equipment compound, as shown on drawing Attachment H4.3.
- Electrical Power for New Compressor. Provide power to the new compressor from the existing electrical distribution panel located as shown on drawing Attachment H4.3. The panel has 600A/480V of unallocated power that is available for the work. Provide circuit breakers, programmable electronic soft start for the compressor prime mover, FVNR starters for cooling fan and pre-lube pump, conduit and wiring as required. New electrical equipment located outside of a hazardous area shall be housed in a NEMA 3R enclosure.

CNG Compressor System.

- 1.14.1.1. General. These requirements apply to a system consisting of one new CNG compressor and related equipment, intended for vehicular-use natural gas only, and outdoor installation. The design MSA-supply pressure is 150 PSIG, with a full range of 125 to 170 PSIG. Compressor vibration shall comply with API 618.
- 1.14.1.2. **Compressor.** Provide the same Ariel JGP 2-throw, 4-stage compressor as the one being replaced. Cylinders shall be optimized to fully load the 200 HP prime mover at a design 1st-stage suction pressure of 50 PSIG.
- 1.14.1.3. **Discharge Pressure.** Control-stop pressure for compressor discharge shall be 4500 PSIG.
- 1.14.1.4. **Backflow Prevention.** A check valve shall be included immediately upstream of the suction connection to the new compressor, to protect the existing compressor and the gas dryer. Also provide a discharge-check valve.

1.14.1.5. Additional Requirements.

 Lights to indicate main power is energized, condition light for the compressor indicating "running" or "standby". Lights shall be visible in bright daylight from outside of the CNG-equipment compound.

- First-out (fault) annunciation.
- Hour meter. Compressor shall have a non-resettable hour meter to record cumulative time of operation and may be part of a multi-functional digital display with a backup battery.
- Controls shall be integrated with the existing compressor, so that a master controller can control lead-lag starts. Start of 1 or 2 or 3 compressors shall be based on conditions of both buffer pressure and dispenser starts, and shall be adjustable.
- **Compressor-Skid Enclosure.** Compressor shall be installed within existing enclosure.

Motors and Motor Starters.

- 1.14.1.6. General. Motor for compressor prime mover shall be rated at 125 HP and have a service factor of 1.15 and shall be labeled NEMA Premium Efficiency.
- 1.14.1.7. **Compressor Motor.** Prime mover shall be 125 HP 3-phase electric motor rated NEMA Premium Efficiency with a 1.15 service factor, shall be driven by electronic soft starters, and shall include thermostatically controlled heater. Motors shall also include GFI protection.
- 1.14.1.8. **Starters.** Electronic soft start (ESS) unit for compressor prime mover shall be programmable and include TVSS hardware. Starters for cooler fan and pre-lube pump shall be FVNR type. All starters shall be located in a common MCC lineup protected by a NEMA 3R, unless approved otherwise.

Piping.

- 1.14.1.9. General. All new piping shall be fabricated and tested per ASTM/ANSI B31.3. For 2-inch or under nominal pipe size with maximum operation pressure greater than 15 PSIG, the connections shall be socket welded, with five (5) percent random dye-penetrant examination and fifty (50) percent random visual examination. For over 2-inch nominal pipe size with maximum operation pressure greater than 15 PSIG, the connections shall be butt welded with five (5) percent random-sample radiographic examination and fifty (50) percent random visual examination.
- 1.14.1.10. **Routing.** All piping in the equipment compound shall be routed above ground and shall have engineered pipe supports.
- 1.14.1.11. **Depressurization.** All pipe runs and system components shall include a means to isolate them and bleed to atmospheric pressure.

1.14.1.12. **Pre-Startup Pipe Cleaning.** Contractor shall clean and protect pipe inside of sections from dirt and liquids during field fabrication, and thoroughly clean out all pipe sections prior to startup, and shall take all means necessary to ensure that piping contaminants do not damage CNG equipment or buses.

Emergency Shutdown System.

3.1.8.1 General. An emergency shutdown system shall be provided that, when activated, shall stop all compressor motors at the facility, shut off the gas supply to all compressors, shut off the discharge of CNG, and shut off the flow of CNG from the buffer and to all CNG dispensers. The system shall be integrated with the existing ESD system at the facility.

3.1.9 General Requirements

- **3.1.9.1 Storage**. Once removed the existing compressor shall be prepared for long-term storage. It shall be wrapped and placed on a pallet and stored at a location designated by City's Project Manager.
- **3.1.9.2 Warranty**. New compressor shall have a minimum of one year warranty including parts and labor.

Minimum Specifications CNG Compressor Attachment 1a

The new compressor shall meet the same specification as the compressor being replaced.

- Ariel JGP/2, 4 Stage Reciprocating Compressor
- 255 scfm capacity @ 40 psi Inlet Pressure (125hp)
- ~ 180 scfm Flow Capacity @ 25 psig Compressor Inlet Minimum
- ~ 305 scfm Flow Capacity @ 50 psig Compressor Inlet Maximum
- 4500 psig Discharge
- 125 Bhp, 480VAC, 1800 RPM TEFC Electric Motor

