SCOPE OF WORK FOR MAINTENANCE SERVICES OF TWO COMPRESSED NATURAL GAS FUELING SYSTEMS FOR THE MORONGO BASIN TRANSPORTATION AUTHORITY
(Exhibit A)

1 - GENERAL

1.01 BACKGROUND.

A. The Morongo Basin Transit Authority (MBTA or Authority) owns two existing and functional CNG fueling facilities. One is located at the Authority's main facility in Joshua Tree, CA, and the other is at a satellite location in Twentynine Palms, CA. The Authority is seeking proposals to provide ongoing maintenance and repair services for both CNG fueling facilities.

B. Document Contents. This document contains the scope of work and requirements for the maintenance-services work on the CNG facilities.

C. Project Locations.

1. Main location: 62405 Verbena Rd., Joshua Tree, CA 92252

2. Satellite location: 6994 Bullion Ave., Twentynine Palms, CA 92277

1.02 CONTRACTOR QUALIFICATIONS

A. Contractor (firm) shall have a minimum of three years direct experience in the maintenance of CNG fueling facilities, including CNG compressors, natural-gas dryers, CNG dispensers, and PLC-based equipment controllers. Contractor shall possess training certifications or otherwise be an authorized service provider for at least one CNG-compressor manufacturer (ANGI, IMW, Greenfield/Atlas Copco, or approved equal), and for at least one gas-dryer manufacturer (Flair SPX, PSB or Xebec) at time of award of contract. The Authority may accept alternative or equivalent qualifications at its discretion.

B. Contractor shall be equipped with a laptop PC with modem or wifi connectivity and PC Anywhere software (or approved equal), for the purpose of calling into the compressor control panel remotely.

C. Contractor shall have at least two technicians on staff able to comply with article 1.02. Further, technicians shall be skilled in reading Piping and Instrumentation Diagrams (P&IDs) and Electrical Schematics, debugging electrical control systems and will be trained in the proper use of specialized tools required by certifying manufacturers.

D. Technicians must have a minimum of three years direct CNG experience on systems of equivalent size and complexity. A minimum of two qualified technicians must be available at all times and each must be equipped with a pager (for fault callouts by PLC modems) and cellular phone as well as all working tools and safety equipment.

E. Contractor shall provide documentation indicating all required training and certifications, and/or any narrative supporting why such documentation is not necessary and/or available.

1.03 DESCRIPTION OF THE CNG-FUELING FACILITIES TO BE MAINTAINED

A. General Equipment List for Main Facility. The facility includes the following equipment configuration:

1. Single tower suction-side gas dryer with dew-point sensor and manually initiated and automatically terminating regeneration.

2. (1) Greenfield CU compressor skid with 75 HP electric-motor drive.

3. (1) two-hose public-sale fast-fill dispenser with 3-bank internal sequencing.

4. Three-bank valve-control panel w/ storage bypass and three-bank priority fill.

5. (3) approx. 11,000 SCF ASME CNG storage vessels for three-bank fast-fill fueling with individual PRVs.

6. Time-fill subsystem.

7. Greenfield two-hose fast-fill dispenser with public-access fuel-management terminal.

B. General Equipment List for Satellite Facility. The facility includes the following equipment configuration:

1. Xebec single tower suction-side gas dryer with dew-point sensor and manually initiated and automatically terminating regeneration.

2. One Greenfield CU compressor skid with electric-motor drive. One ANGI NG50E compressor skid with electric motor drive.

3. One one-hose fast-fill dispenser with 3-bank internal sequencing.

4. Valve-control panel w/ storage bypass and three-bank priority fill.

5. (3) approx. 11,000 SCF ASME CNG storage vessels for three-bank fast-fill fueling with individual PRVs.

6. Time-fill subsystem.

7. Greenfield two-hose fast-fill dispenser.

C. Additional Equipment Requirements. Refer to published maintenance requirements for the following primary CNG equipment:

1. Main facility:

a. Greenfield model CU compressor skid with 75 HP drive motor.

b. Xebec model STR gas dryer.

2. Satellite facility:

a. ANGI NG50E compressor skid.

b. Greenfield B65 compressor skid; includes controls that only allow one compressor to start and run at a time.

c. Xebec model STR gas dryer.

2 - DETAILED WORK SCOPE

2.01 ROUTINE SERVICE VISITS

A. General. These requirements apply equally to the main and satellite locations, unless noted otherwise. Contractor will physically visit and inspect each facility for the purpose of checking on the status of the station equipment and making necessary or appropriate adjustments to the equipment. Contractor shall test and verify system functionality upon completion of any repair or maintenance work prior to leaving the site, and shall log test result.

B. The work to be performed during each visit will include the following services or those recommended by the manufacturer, which ever is more stringent.

1. Start all compressors if possible and check all pressure and start/stop settings and adjust as appropriate. (Coordinate with normal fueling window and/or coordinate with Authority personnel to allow for CNG throughput and ability to start compressors.)

2. Check control operations, including control-stop and control-start pressures.

3. Check crankcase oil level and re-fill as necessary.

4. Check and drain inlet scrubber/vapor recovery tank and check recovery system as required.

5. Drain any manual inlet and discharge gas filters; check differential pressure gauge(s); and replace filter cartridges as required.

6. Check for gas and oil leaks and repair, if necessary.

7. Inspect for general condition of station and log findings. Written log is to be left on-site at all times.

8. Log fluid amounts added and drained.

9. Log station operating conditions, including compressor hours, electric meter reading, gas meter reading, pressure and temperature readings (interstage and discharge) while running.

10. Check and clean intercooler tubing and aftercooler as required.

11. Inspect storage vessels, valves and fittings for leaks and check relief valves, vent lines, and vent-weep holes for blockage.

12. Inspect dispenser hoses and nozzles for wear, cracking, etc.

13. Drain dryer filters / condensates.

14. Observe compressor while operating under load (or start and load) to verify the following are within factory tolerances: interstage pressures and temperatures, discharge pressure and temperature, and packing leak/blow-by rates.

C. In addition to the above services, the following will be provided at the intervals indicated and shall be part of the "Routine Service Visits" at no extra cost (update requirements and frequency per manufacturers' published intervals).

1. Perform visual check of fill hoses and lubricate fill connectors (monthly).

2. Check operation of the time-fill posts (monthly).

3. Check operation of fast-fill dispenser.

4. Check operation of indicator lights/annunciator display and all safety shutdowns (quarterly).

5. Drain condensate from storage vessels (quarterly).

6. Inspect inlet and discharge gas filters (every 6 months).

7. Conduct electrical-continuity test on dispenser hoses (every 6 months).

8. Check torque on compressor- and driver-mounting bolts (every 6 months).

9. Verify operation of all actuated valves on dryer by manually energizing actuators (every 6 months).

10. Change compressor oil (manufacturer-recommended interval on run hours).

11. Manually initiate dryer regeneration in advance of desiccant reaching saturation (as required based on auto-dew sensor). Notify the Authority prior to all dryer regenerations.

D. Frequency of Routine Service Visits. The frequency of Routine Service Visits shall be two times per week for the first month of contract, then once per week for remainder of contract term.

E. Contractor shall check in and check out with the designated Authority Maintenance Supervisor or manager at the facility for each such site visit.

2.02 PLANNED MAINTENANCE SERVICE

A. General. These requirements apply equally to the main and satellite locations, unless noted otherwise. Contractor will monitor and advise the Authority of recommended service intervals as they approach, however, this work is not included in the Routine Field Maintenance Services provided under article 2.01 and will not be performed without prior approval by the Authority. Contractor shall obtain written authorization, in advance, from a Authority representative for all non-emergency visits and work. Authority will not be obligated to pay for such work if not pre-approved by an authorized representative of the Authority. Contractor shall test and verify system functionality upon completion of any repair work prior to leaving the site, and shall log test result.

B. Planning. Contractor is to prepare a one-year look-ahead planned work schedule with estimated cost to assist the Authority in preparation of budgets (Authority operates on a Fiscal Year calendar of July-June) for the maintenance of the facility. Estimate is due January 15th each year.

C. Compliance With Respective Facility & Equipment Manuals. Contractor will perform periodic service, maintenance, and certifications according to the recommended service schedule and guidelines provided by the manufacturers of the major components as indicated in the facility's Operation and Maintenance Manual, all subsequent service bulletins, all applicable codes and regulations, and as mutually agreed with the Authority. Cost for services under this article not covered under 2.01 C will be charged on a time and materials basis.

D. Contractor shall check in and check out with Authority maintenance staff at the facility for each such site visit.

E. Certify Pressure Relief Valves (PRVs). Recertification shall be performed by a factory/ASME authorized facility. Contractor shall recertify any out-of-date PRVs within one month of project award.

1. All PRVs protecting vessels shall be recertified annually.

2. All PRVs protecting other pressure systems shall be recertified every three years.

F. Work Authorization. Contractor shall obtain a separate purchase order from the Authority for any work performed under this article 2.02.

2.03 REPAIRS AND EMERGENCY CALL OUTS

A. General. Contractor shall test and verify system functionality upon completion of any repair work prior to leaving the site, and shall log test result.

B. Each facility PLC is equipped with an auto-dial out system, and the Authority may elect to have the contractor be a designated call recipient in case of system fault. Contractor shall respond by telephone to designated Authority staff for all service calls on a 24-hour 7-day a week basis within 20 minutes.

C. On-site response time by contractor shall be within (3) hours of the request in emergency situations, unless otherwise notified by an Authority representative. The Authority will be given the appropriate contacts for this service. Failure to respond within the 3 hours of the request will cause a deduction of $50.00 for every hour that the contractor is non-responsive.

D. Contractor will defer all non-emergency service calls to normal business hours, provided such delays would not result in an unsafe condition or the inability to fuel vehicles. Contractor will then provide service at the beginning of the next business day. Contractor will use its best commercial efforts to provide service at the site, if necessary, within five (5) hours of notice.

E. The Contractor shall provide an all-weather placard for posting at the station indicating a telephone number providing 24 hour access by telephone to contact Contractor to obtain assistance as may be required.

F. Contractor shall check in and check out with Authority maintenance staff at the facility for each such site visit.

G. Work Authorization. Contractor shall obtain a separate purchase order or 'notice to proceed' from the Authority prior to any work performed under this article 2.03.

2.04 PARTS AND CONSUMABLES

A. The Contractor must supply all consumables and replacement parts required for the work under articles 2.01 – 2.03. Contractor shall invoice the Authority for these materials as additional costs, on the invoice for which the work was performed. The cost of parts is to be market pricing and is subject to approval by the Authority.

B. The Authority may have an inventory of spare parts and consumables stored at the facilities. Contractor shall log all parts and materials, including listing of manufacturer, part number, and quantity, used from the Authority stock.

C. Contractor can supply a recommended list of items that could be inventoried by the Authority, if they do not intend to stock due to age, turnover, or volume, at which time the Authority will determine whether or not to stock the items to prevent downtime, or lags in service.

D. Parts replaced under warranty are to be provided through the contractor's construction contract, and the maintenance contractor is responsible to assure that parts covered under warranty are procured as such, on behalf of the Authority. The Authority will intervene should the warrantor not honor said warranties.

2.05 SAFETY SYSTEMS

A. Test function of ESD system, including activating all buttons and verifying proper action of all ESD valves at compressor inlets, compressor outlets and dispenser inlets, as well as verify coded pager notification of ESD fault (every 6 months).

B. Codes and other safety-system requirements.

1. All labor, components and materials provided by the Contractor shall be compliant with the latest published editions of NFPA-52, NFPA-30A, NFPA-70, and CFC/UFC article 52 and all federal and state laws applicable.

2. Any station condition deemed to be unsafe by the Contractor shall be reported immediately to the Contractor's main Authority contact or other Authority supervisor as available.

3. Any station condition not compliant with the codes and standards referenced above that are observed by the Contractor shall be reported immediately to the Contractor's main Authority contact or other Authority supervisor as available.

3 - METHODS AND NON-TECHNICAL REQUIREMENTS

3.01 WASTE MATERIALS AND HAZARDOUS WASTE

A. Contractor shall be responsible for handling, removing from site, and disposing all hazardous materials that are a product or byproduct of station maintenance or repair, in compliance with all jurisdictions having authority at the station. This includes waste removed from the following equipment:

1. Condensate from gas dryer.

2. Condensate from CNG storage vessels.

3. Compressor oil - change outs, and condensate drainage from blowdown vessels and all drained filters.

4. Waste materials from dryer maintenance, including filters and desiccant.

B. Such waste that is removed from equipment but not immediately removed from the site shall be handled and stored in containers that are intended and marked by the container manufacturer for this use.

3.02 FACILITY RECORDS

A. Contractor shall maintain a written and electronic logbook of all routine, preventative, and unscheduled maintenance and repairs performed on each facility, including pertinent measurements, readings and observations. Contractor shall submit copies of all reports on the last day of each month.

B. Contractor shall maintain copies of all Routine Service Visit Reports, Planned Maintenance Service Reports, and Repair and Emergency Call-out Reports as described in articles 2.02 and 2.03 of this specification.

C. Contractor shall maintain an updated spare-parts inventory of any Authority-provided spare parts or consumables. All parts and consumables are to be accounted for at all times (by facility location, manufacturer, model number, and quantity), either by physically being on site, or by being on order for parts recently used at the facilities.

D. Redline drawings not later than one week after making any modifications to the CNG Station or components are to be maintained, available on site, and are the property of the owner.

E. A complete set of Operation and Maintenance Manuals provided by the Authority are to be kept on each facility site.

3.03 REPORTS TO THE AUTHORITY

A. Routine Service Visit Report Per Facility. The Service Technician's checklist indicating the following:

1. Date and time of service visit.

2. Compressor run hours.

3. Electric utility meter, gas utility meter, and pressure gauge readings. (Suction and interstage gas, crankcase, fill reference, and blowdown tank pressures).

4. Any control-panel fault codes.

5. Items checked, station operating condition, and corrective action taken if applicable.

6. Parts replaced under warranty.

7. Parts replaced and not covered by warranty, including cost.

8. Consumables replaced, including cost.

9. Other items as may be determined by Contractor or the Authority.

B. Planned Maintenance Service Report Per Facility. The Service Technician's Service Report indicating the following:

1. Date and time of service visit.

2. Compressor run hours.

3. Items repaired or replaced, including reason, service time incurred and cost for parts and service time.

4. Other items as may be determined by Contractor or requested by the Authority.

C. Repair and Emergency Call-out Reports. Contractor will provide a Service Event Record for any service required as a result of a fault condition at a station. The report will include the Service Report for the incident indicating the following:

1. Location, date and time of service incident.

2. Time and method of notice.

3. Compressor run hours.

4. Cause for fault condition.

5. Action taken to restore service, items repaired or replaced, including reason, service time incurred and cost for parts and service time.

6. Whether fault condition caused interruption of station service, and if so, the duration of the interruption.

7. Time service was restored.

8. Other items as may be determined by Contractor or requested by the Authority.

D. A bi-monthly safety inspection for each facility shall be performed by the Contractor and submitted with the Contractor's monthly invoice.

E. If the Contractor intends to make any material modification to either facility, including replacement, exchange, removal or addition of any gas- or CNG-process equipment or safety system, the Contractor shall notify the Authority of its intent to do so in writing prior to implementation of the work. Contractor shall also provide written documentation of the changes within two work days of the completion of the modification.

3.04 INVOICING

A. An invoice will be submitted monthly to MBTA, Facility Manager, 62405 Verbena Rd., Joshua Tree, CA 92252, and shall include:

1. One twelfth of the annual contract value for all services described under article 2.01.

2. A list of all parts and consumables expended during the month for said services.

3. Reports including daily monitoring data, Routine Service Reports for the billing period; and the Bi-monthly Safety Inspection Report for the billing period.

4. Other costs as indicated on the price schedule submitted with quote.

5. Authority's purchase order number.

B. A separate invoice will be submitted for each Planned Maintenance Service and Repair not covered under 2.01 C, and for each Emergency Call Out, and shall include:

1. Labor hours and cost. Trip time or other charges are to be billed as a separate line item as allowed in the price schedule submitted with quote.

2. Cost of parts and consumables. Attach a detailed list of materials indicating quantity, cost and mark-up. Other documentation may be required upon request of the Authority.

3. Copy of Planned Maintenance Service Report or Repair and Emergency Call-Out Report associated with the work.

4. Other costs as indicated on the price schedule submitted with quote.

3.05 Effective Date/Term and Price Changes

A. Once the agreement has been approved by the Authority and the Contractor, it shall be effective as of the first day of the month following execution, for the initial term of one year, automatically renewable for two more years, with an additional two option years.

B. Proposed increases to the price schedule shall be agreed to two months prior to the end of the first-year maintenance period, and shall not exceed previous year inflation per Producer Price Index as published by U.S. Department of Labor.