SERVICES CONTRACT Instrument Air Compressor System Replacement Specification No. S-2023-1402BD

This SERVICES CONTRACT (hereinafter referred to as "Contract"), is made and entered into as of the date fully executed below, by and between Orange County Sanitation District (hereinafter referred to as "OC San") and Air & Lube Systems, Inc. (hereinafter referred to as "Contractor"), and collectively referred to herein as the "Parties."

RECITALS

WHEREAS, OC San desires to obtain the services of Contractor for the replacement of the air compressor system at Plant No. 2 ("Services") as described in Exhibit "A" attached hereto and incorporated herein by this reference; and

WHEREAS, Contractor is qualified to perform the Services by virtue of experience, training, education, and expertise; and

WHEREAS, OC San desires to engage Contractor to provide the Services; and

WHEREAS, OC San selected Contractor to provide the Services in accordance with OC San's current Purchasing Ordinance; and

WHEREAS, on October 4, 2023, OC San's Operations Committee, by minute order, authorized execution of this Contract.

NOW, THEREFORE, in consideration of the above recitals and the mutual promises and benefits specified below, the Parties agree as follows:

General.

- 1.1 This Contract and all exhibits hereto are made by OC San and the Contractor.
- 1.2 The following exhibits are incorporated by reference and made part of this Contract.

Exhibit "A" – Scope of Work

Exhibit "B" – Bid

Exhibit "C" – Determined Insurance Requirement Form

Exhibit "D" – Contractor Safety Standards

Exhibit "E" - Human Resources Policies

Exhibit "F" – General Conditions

Exhibit "G" – Not Used

- 1.3 In the event of any conflict or inconsistency between the provisions of the Contract and any of the provisions of the exhibits hereto, the provisions in the document highest in precedence shall be controlling. The order of precedence of the applicable documents is set forth below:
 - a. Addenda issued prior to the deadline for submitting the bids the last addendum issued will have the highest precedence
 - b. Services Contract

- c. Exhibit "A" Scope of Work
- d. Permits and other regulatory requirements
- e. Exhibit "C" Determined Insurance Requirement Form
- f. Exhibit "F" General Conditions
- g. Exhibit "D" Contractor Safety Standards
- h. Notice Inviting Bids
- i. Exhibit "B" Bid
- 1.4 Except as expressly provided otherwise, OC San accepts no liability for any expenses, losses, or actions incurred or undertaken by Contractor as a result of work performed in anticipation of providing the Services to OC San.
- 1.5 Work Hours: All work shall be scheduled Monday through Friday, between the hours of 7:30 a.m. and 4:30 p.m.
- 1.6 Days: Shall mean calendar days, unless otherwise noted.
- 1.7 OC San holidays (non-working days) are as follows: New Year's Day, Martin Luther King, Jr. Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, Day after Thanksgiving, Christmas Eve, and Christmas Day.
- 1.8 Work: Shall mean all work, labor, and materials necessary to provide the Services.
- 1.9 The provisions of this Contract may be amended or waived only by an amendment executed by authorized representatives of both Parties.
- 1.10 The various headings in this Contract are inserted for convenience only and shall not affect the meaning or interpretation of this Contract or any paragraph or provision hereof.

2. Scope of Work.

- 2.1 Contractor shall provide the Services identified in Exhibit "A" in accordance with generally accepted industry and professional standards.
- 2.2 Modifications to Scope of Work. OC San shall have the right to modify the Scope of Work at any time. All modifications must be made by an amendment signed by both Parties and consistent with Exhibit "F" General Conditions (General Conditions), including the sections entitled REQUEST FOR CHANGE (CHANGES AT CONTRACTOR'S REQUEST) and OWNER INITIATED CHANGES.
- 2.3 <u>Familiarity with Work</u>. By executing this Contract, Contractor warrants that: (a) it has investigated the work to be performed; (b) it understands the facilities, difficulties, and restrictions of the work under this Contract; and (c) it has examined the site of the work and is aware of all conditions at the site. Should Contractor discover any latent or unknown condition materially differing from those inherent in the work or as represented by OC San, it shall immediately inform OC San of this and shall not proceed, except at Contractor's risk, until written instructions are received from OC San.
- 2.4 Performance. Time is of the essence in the performance of the provisions hereof.

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3. Contract Term.

- 3.1 The Services shall be completed within three hundred sixty-five (365) calendar days from the effective date of the Notice to Proceed.
- 3.2 <u>Extensions</u>. The term of this Contract may be extended only by an amendment signed by both Parties and consistent with the General Conditions, including the section entitled EXTENSION OF TIME FOR DELAY.

4. Compensation.

- 4.1 As compensation for the Services provided under this Contract, OC San shall pay Contractor a total amount not to exceed Two Hundred Five Thousand Four Hundred Two Dollars (\$205,402.00).
- 4.2 Contractor shall provide OC San with all required premiums and/or overtime work at no charge beyond the amount specified above.

5. Payments and Invoicing.

- 5.1 OC San shall pay itemized invoices for work completed in accordance with Exhibit "A" thirty (30) days from receipt of the invoice and after approval by OC San's Project Manager or designee. OC San shall be the determining party, in its sole discretion, as to whether the Services have been satisfactorily completed.
- 5.2 Contractor shall submit its invoices to OC San Accounts Payable by electronic mail to APStaff@OCSan.gov. In the subject line, include "INVOICE" and the Purchase Order Number.
- 5.3 The invoices shall be consistent with the General Conditions, including the section entitled PAYMENT FOR WORK.

6. California Department of Industrial Relations Registration and Record of Wages.

- To the extent Contractor's employees and/or its subcontractors perform work related to this Contract for which Prevailing Wage Determinations have been issued by the California Department of Industrial Relations (DIR) as more specifically defined under Labor Code section 1720 et seq., prevailing wages are required to be paid for applicable work under this Contract. It is Contractor's responsibility to interpret and implement any prevailing wage requirements and Contractor agrees to pay any penalty or civil damages resulting from a violation of the prevailing wage laws.
- 6.2 Contractor and its subcontractors shall comply with the registration requirements of Labor Code section 1725.5. Pursuant to Labor Code section 1771.4(a)(1), the work is subject to compliance monitoring and enforcement by the California Department of Industrial Relations (DIR).
- 6.3 Pursuant to Labor Code section 1773.2, a copy of the prevailing rate of per diem wages is available upon request at OC San's principal office. The prevailing rate of per diem wages may also be found at the DIR website for prevailing wage determinations at http://www.dir.ca.gov/DLSR/PWD.
- 6.4 Contractor and its subcontractors shall comply with the job site notices posting requirements established by the Labor Commissioner per Title 8, California Code of Regulations section 16461(e). Pursuant to Labor Code sections 1773.2 and

- 1771.4(a)(2), Contractor shall post a copy of the prevailing rate of per diem wages at the job site.
- 6.5 Contractor and its subcontractors shall maintain accurate payroll records and shall comply with all the provisions of Labor Code section 1776. Contractor and its subcontractors shall submit payroll records to the Labor Commissioner pursuant to Labor Code section 1771.4(a)(3). Pursuant to Labor Code section 1776, the Contractor and its subcontractors shall furnish a copy of all certified payroll records to OC San and/or the general public upon request, provided the public request is made through OC San, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement of the Department of Industrial Relations. Pursuant to Labor Code section 1776(h), penalties for non-compliance with a request for payroll records may be deducted from progress payments.
 - 6.5.1 As a condition to receiving payments, Contractor agrees to present to OC San, along with any request for payment, all applicable and necessary certified payrolls and other required documents for the period covering such payment request. Pursuant to Title 8, California Code of Regulations section 16463, OC San shall withhold any portion of a payment, up to and including the entire payment amount, until certified payroll forms and any other required documents are properly submitted. In the event certified payroll forms do not comply with the requirements of Labor Code section 1776, OC San may continue to withhold sufficient funds to cover estimated wages and penalties under the Contract.
- 6.6 The Contractor and its subcontractors shall comply with Labor Code section 1774 and section 1775. Pursuant to Labor Code section 1775, the Contractor and any of its subcontractors shall forfeit to OC San a penalty of not more than two hundred dollars (\$200) for each calendar day, or portion thereof, for each worker paid less than the prevailing rates as determined by the DIR for the work or craft in which the worker is employed for any work.
 - 6.6.1 In addition to the penalty and pursuant to Labor Code section 1775, the difference between the prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate shall be paid to each worker by the Contractor or its subcontractor.
- 6.7 Contractor and its subcontractors shall comply with Labor Code sections 1810 through 1815. Contractor and its subcontractors shall restrict working hours to eight (8) hours per day and forty (40) hours per week, except that work performed in excess of those limits shall be permitted upon compensation for all excess hours worked at not less than one and one-half (1.5) times the basic rate of pay, as provided in Labor Code section 1815. The Contractor shall forfeit, as a penalty to OC San, twenty-five dollars (\$25) per worker per calendar day during which such worker is required or permitted to work more than eight (8) hours in any one calendar day and forty (40) hours in any one calendar week in violation of Labor Code sections 1810 through 1815.
- 6.8 Contractor and its subcontractors shall comply with Labor Code sections 1777.5, 1777.6, and 1777.7 concerning the employment of apprentices by Contractor or any subcontractor.

- 6.9 Contractor shall include, at a minimum, a copy of the following provisions in any contract it enters into with any subcontractor: Labor Code sections 1771, 1771.1, 1775, 1776, 1777.5, 1810, 1813, 1815, 1860, and 1861.
- 6.10 Pursuant to Labor Code sections 1860 and 3700, the Contractor and its subcontractors will be required to secure the payment of compensation to employees. Pursuant to Labor Code section 1861, Contractor, by accepting this contract, certifies that:

"I am aware of the provisions of section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract."

Contractor shall ensure that all its contracts with its subcontractors provide the provision above.

- 6.11 Contractor shall comply with the provisions specified in the General Conditions section entitled LAWS TO BE OBSERVED.
- 7. <u>Davis-Bacon Act</u>. Not Used.
- **8.** <u>Damage to OC San's Property</u>. Any of OC San's property damaged by Contractor, any subcontractor, or by the personnel of either will be subject to repair or replacement by Contractor at no cost to OC San and consistent with the General Conditions, including the section entitled PRESERVATION OF PROPERTY.
- **9.** <u>Freight (F.O.B. Destination)</u>. Contractor assumes full responsibility for all transportation, transportation scheduling, packing, handling, insurance, and other services associated with delivery of all products deemed necessary under this Contract.
- **10.** Audit Rights. Contractor agrees that, during the term of this Contract and for a period of three (3) years after its expiration or termination, OC San shall have access to and the right to examine any directly pertinent books, documents, and records of Contractor relating to the invoices submitted by Contractor pursuant to this Contract.
- 11. Contractor Safety Standards and Human Resources Policies. OC San requires Contractor and its subcontractor(s) to follow and ensure their employees follow all Federal, State, and local regulations as well as the Contractor Safety Standards while working at OC San locations. If, during the course of the Contract, it is discovered that the Contractor Safety Standards do not comply with Federal, State, or local regulations, the Contractor is required to follow the most stringent regulatory requirement at no additional cost to OC San. Contractor, its subcontractors, and all of their employees shall adhere to the safety requirements in Exhibit "A," all applicable Contractor Safety Standards in Exhibit "D," and the Human Resources Policies in Exhibit "E."
- **12.** <u>Insurance.</u> Contractor and all its subcontractors shall purchase and maintain, throughout the term of this Contract and any periods of warranty or extensions, insurance in amounts equal to the requirements set forth in the signed Exhibit "C" Determined Insurance Requirement Form. Contractor shall not commence work under this Contract until all

required insurance is obtained in a form acceptable to OC San, nor shall Contractor allow any subcontractor to commence service pursuant to a subcontract until all insurance required of the subcontractor has been obtained. Failure to obtain and maintain the required insurance coverage shall result in termination of this Contract.

- **13.** Bonds. Not Used.
- 14. Indemnification and Hold Harmless Provision. Contractor shall assume all responsibility for damages to property and/or injuries to persons, including accidental death, which may arise out of or may be caused by Contractor's equipment and/or Services under this Contract, or by its subcontractor(s), or by anyone directly or indirectly employed by Contractor, and whether such damage or injury shall accrue or be discovered before or after the termination of the Contract. Except as to the sole active negligence of or willful misconduct of OC San, Contractor shall indemnify, protect, defend, and hold harmless OC San, its elected and appointed officials, officers, agents, and employees from and against any and all claims, liabilities, damages, or expenses of any nature, including attorneys' fees: (a) for injury to or death of any person, or damage to property, or interference with the use of property arising out of or in connection with Contractor's performance under the Contract, and/or (b) on account of use of any copyrighted or uncopyrighted material, composition, or process; or any patented or unpatented invention, article, or appliance furnished or used under the Contract, and/or (c) on account of any goods and services provided under this Contract. This indemnification provision shall apply to any acts or omissions, willful misconduct, or negligent misconduct, whether active or passive, on the part of Contractor or anyone employed by or working under Contractor. To the maximum extent permitted by law, Contractor's duty to defend shall apply whether or not such claims, allegations, lawsuits, or proceedings have merit or are meritless; or which involve claims or allegations that any of the parties to be defended were actively, passively, or concurrently negligent; or which otherwise assert that the parties to be defended are responsible, in whole or in part, for any loss, damage, or injury. Contractor agrees to provide this defense immediately upon written notice from OC San, and with well qualified, adequately insured, and experienced legal counsel acceptable to OC San. This section shall survive the expiration or early termination of the Contract.
- 15. <u>Independent Contractor</u>. The relationship between the Parties hereto is that of an independent contractor and nothing herein shall be deemed to make Contractor an OC San employee. During the performance of this Contract, Contractor and its officers, employees, and agents shall act in an independent capacity and shall not act as OC San's officers, employees, or agents. Contractor and its officers, employees, and agents shall obtain no rights to any benefits which accrue to OC San's employees.
- **16.** <u>Subcontracting and Assignment</u>. Any subcontracting or assignment shall be governed by the provisions of the General Conditions including the sections entitled SUBCONTRACTING and ASSIGNMENT.
- **17.** <u>Disclosure.</u> Contractor agrees not to disclose, to any third party, data or information generated from this Contract without the prior written consent from OC San.
- **18.** Non-Liability of OC San Officers and Employees. No officer or employee of OC San shall be personally liable to Contractor, or any successor-in-interest, in the event of any default or breach by OC San, or for any amount which may become due to Contractor or to its successor, or for breach of any obligation under the terms of this Contract.

- **19.** Third-Party Rights. Nothing in this Contract shall be construed to give any rights or benefits to anyone other than OC San and Contractor.
- 20. Applicable Laws and Regulations. Contractor shall comply with all applicable Federal, State, and local laws, rules, and regulations. Contractor also agrees to indemnify and hold OC San harmless from any and all damages and liabilities assessed against OC San as a result of Contractor's noncompliance therewith. Any provision required by law to be included herein shall be deemed included as a part of this Contract whether or not specifically included or referenced.
- 21. <u>Licenses, Permits, Ordinances, and Regulations</u>. Contractor represents and warrants to OC San that it has obtained all licenses, permits, qualifications, and approvals of whatever nature that are legally required to provide the Services. Any and all fees required by Federal, State, County, City, and/or municipal laws, codes, and/or tariffs that pertain to the work performed under this Contract will be paid by Contractor.
- **22.** Regulatory Requirements. Contractor shall perform all work under this Contract consistent with the General Conditions, including the section entitled STORMWATER REQUIREMENTS, and in strict conformance with applicable Federal, State, and local regulatory requirements including, but not limited to, 40 CFR 122, 123, 124, 257, 258, 260, 261, and 503, Title 22, 23, and Water Codes Division 2.
- **23. Environmental Compliance.** Contractor shall, at its own cost and expense, comply with all Federal, State, and local environmental laws, regulations, and policies which apply to the Contractor, its subcontractors, and the Services, including, but not limited to, all applicable Federal, State, and local air pollution control laws and regulations.
- 24. South Coast Air Quality Management District's Requirements. It is Contractor's responsibility to ensure that all equipment furnished and installed be in accordance with the latest rules and regulations of the South Coast Air Quality Management District (SCAQMD). All Contract work practices, which may have associated emissions such as sandblasting, open field spray painting, or demolition of asbestos containing components or structures shall comply with the appropriate rules and regulations of SCAQMD.
- **25.** <u>Warranties.</u> Contractor shall provide the warranties required in the Scope of Work and in the General Conditions, including the section entitled WARRANTY (CONTRACTOR'S GUARANTEE).
- **26.** <u>Dispute Resolution</u>. Any disputes between the Parties shall be resolved as specified in the General Conditions, including the section entitled DISPUTES.
- 27. Liquidated Damages. Not Used.
- 28. Remedies. In addition to other remedies available in law or equity, if the Contractor fails to perform the Services or repudiates its obligations under this Contract, or if OC San rejects the goods or Services or revokes acceptance of the Services, OC San may (a) cancel the Contract; (b) recover whatever amount of the purchase price OC San has paid, and/or (c) "cover" by purchasing, or contracting to purchase, substitute equipment and services for those due from Contractor. In the event OC San elects to "cover" as described in (c), OC San shall be entitled to recover from Contractor as damages the difference between the

cost of the substitute equipment and services and the Contract price, together with any incidental or consequential damages.

29. Force Majeure. Neither party shall be liable for delays caused by accident, flood, acts of God, fire, labor trouble, war, acts of government, or any other cause beyond its control, but the affected party shall use reasonable efforts to minimize the extent of the delay. Work affected by a force majeure condition may be rescheduled by mutual consent of the Parties.

30. Termination.

- 30.1 OC San reserves the right to terminate this Contract for its convenience, with or without cause, in whole or in part, at any time, by written notice from OC San. Upon receipt of a termination notice, Contractor shall immediately discontinue all work under this Contract (unless the notice directs otherwise). OC San shall thereafter, within thirty (30) days, pay Contractor for work performed (cost and fee) through the date of termination. Contractor expressly waives any claim to receive anticipated profits to be earned during the uncompleted portion of this Contract. Such notice of termination shall terminate this Contract and release OC San from any further fee, cost, or claim hereunder by Contractor other than for work performed through the date of termination.
- 30.2 OC San reserves the right to terminate this Contract immediately upon OC San's determination that Contractor is not complying with the Scope of Work requirements, if the level of service is inadequate, or for any other default of this Contract.
- 30.3 OC San may also immediately terminate this Contract for default, in whole or in part, by written notice to Contractor:
 - if Contractor becomes insolvent or files a petition under the Bankruptcy Act; or
 - if Contractor sells its business; or
 - if Contractor breaches any of the terms of this Contract; or
 - if the total amount of compensation exceeds the amount authorized under this Contract.
- 30.4 All OC San's property in the possession or control of Contractor shall be returned by Contractor to OC San on demand or at the expiration or early termination of this Contract, whichever occurs first.
- **31.** Attorney's Fees. If any action at law or in equity or if any proceeding in the form of an Alternative Dispute Resolution (ADR) is necessary to enforce or interpret the terms of this Contract, the prevailing party shall be entitled to reasonable attorney's fees, costs, and necessary disbursements in addition to any other relief to which the prevailing party may be entitled and as specified in the General Conditions, including in the section entitled CLAIMS.
- **Waiver.** The waiver by either party of any breach or violation of, or default under, any provision of this Contract shall not be deemed a continuing waiver by such party of any other provision or of any subsequent breach or violation of this Contract or default thereunder. Any breach by Contractor to which OC San does not object shall not operate as a waiver of OC San's rights to seek remedies available to it for any subsequent breach.
- **33. Severability.** If any section, subsection, or provision of this Contract; or any agreement or instrument contemplated hereby; or the application of such section, subsection, or provision is held invalid, the remainder of this Contract or instrument in the application of such section,

subsection, or provision to persons or circumstances other than those to which it is held invalid, shall not be affected thereby, unless the effect of such invalidity shall be to substantially frustrate the expectations of the Parties.

- **34. Survival.** The provisions of this Contract dealing with payment, warranty, indemnity, and forum for enforcement shall survive expiration or early termination of this Contract.
- **35. Governing Law.** This Contract shall be governed by and interpreted under the laws of the State of California and the Parties submit to jurisdiction in the County of Orange in the event any action is brought in connection with this Contract or the performance thereof.

36. Notices.

36.1 All notices under this Contract must be in writing. Written notice shall be delivered by personal service, by electronic telecommunication, or sent by registered or certified mail, postage prepaid, return receipt requested, or by any other overnight delivery service which delivers to the noticed destination and provides proof of delivery to the sender. Rejection or other refusal to accept or the inability to deliver because of changed address for which no notice was given as provided hereunder shall be deemed to be receipt of the notice, demand, or request sent. All notices shall be effective when first received at the following addresses:

OC San: Donald Herrera

Senior Buyer

Orange County Sanitation District

10844 Ellis Avenue

Fountain Valley, CA 92708

dherrera@ocsan.gov

Contractor: Miguel Micheltorena

Secretary

Air & Lube Systems, Inc. 8353 Demetre Avenue Sacramento. CA 95828

mmicheltorena@airandlube.com

- 36.2 Each party shall provide the other party written notice of any change in address as soon as practicable.
- **37.** Read and Understood. By signing this Contract, Contractor represents that it has read and understood the terms and conditions of the Contract.
- **38.** Authority to Execute. The persons executing this Contract on behalf of the Parties warrant that they are duly authorized to execute this Contract and that by executing this Contract, the Parties are formally bound.
- **39.** Entire Agreement. This Contract constitutes the entire agreement of the Parties and supersedes all prior written or oral communications and all contemporaneous oral agreements, understandings, and negotiations between the Parties with respect to the subject matter hereof.

IN WITNESS WHEREOF, intending to be legally bound, the Parties hereto have caused this Contract to be signed by their duly authorized representatives.

ORANGE COUNTY SANITATION DISTRICT

Dated:	Ву:	Marshall Goodman
		Marshall Goodman Chair, Operations Committee
Dated:	Ву:	Tina Knapp, MMC Assistant Clerk of the Board
Dated:	Ву:	Ruth Zintzun Finance & Procurement Manager
	AIR	& LUBE SYSTEMS, INC.
Dated:	Ву:	
		Print Name and Title of Officer

IG:LL

EXHIBIT A SCOPE OF WORK

For

Instrument Air Compressor Replacement

EXHIBIT A SOLICITATION SCOPE OF WORK INSTRUMENT AIR COMPRESSOR SYSTEM REPLACEMENT SPECIFICATION NO. S-2023-1402BD

SCOPE OF WORK

1 Location of Work

The work covered under this Contract will take place at the following Orange County Sanitation District location: ("OC San's" or the "Sanitation District's"):

Plant No. 2 Cen Gen- 22212 Brookhurst Street, Huntington Beach, CA 92648

2 General

This Scope of Work (SOW) defines the requirements for the work at Plant 2 Central Generation (Cen Gen) Facilities Building to replace the legacy instrument air compressor system and related appurtenances. This work includes the removal of the existing instrument air compressors and installation of a new in-kind replacement instrument air compressor system including associated piping; valves; instruments, controls; appurtenances; and testing, placement into operation, commissioning, and training requirements as defined herein.

The Contractor shall furnish all labor, equipment, materials, machinery, tools, supplies, insurance, permits, licenses, transportation, and other incidentals necessary to complete all tasks and items of work described within the Attachments and other portions of this SOW.

The Contractor shall complete the following tasks:

- Submit procurement documents
- Submit product submittals
- Submit work plan incorporating all OC SAN comments
- Submit project schedule
- Demolition of the legacy compressor system
- Prepare drawings
- Fabricate the new air compressor system
- Repair the equipment concrete foundation and anchor bolt system and, install anchor bolts
- Install the new compressors on existing or modified foundations as required
- Perform factory and field testing on the new compressor system and appurtenances
- Test and commission the complete system
- Provide training of OC San staff on system operation and maintenance

3 Attachments

Attachment **A-1 Work Site Plan** shows the project location inside of the Plant No. 2 Central Generation Building Basement. Attachment **A-2 Legacy Project Equipment Service Manual** serves as a reference to the documentation of the equipment previously installed and needing to be rehabilitated by this project. Attachment **A-3 Project P&ID** shows the scope and limits of the project, including the necessary required changes. Attachment **A-4 Project Layout** shows the layout and location of the project equipment and various appurtenances with tag numbers corresponding to the P&ID tag numbers. Attachment **A-5 Basis of Design** illustrates a sample system that could satisfy the requirements of this SOW but will be the responsibility of the Contractor to ascertain accordinglyand is included for reference purposes only.

- A. A-1 Work Site Plan
- B. A-2 Legacy Project Equipment Service Manual
- C. A-3 Project P&ID
- D. A-4 Project Layout
- E. A-5 Basis of Design
- F. A-6 Contractor Safety Standards
- G. A-7 SOP-130 Crane Safety Program, Ver. 4

4 Overview of the Work

The work outlined herein entails the replacement of the legacy instrument air compressor system and related appurtenances, with suitable replacements. The work includes the major items listed below for convenience; however, the Contractor shall abide by all portions of the contract documents, attachments, details, and requirements detailed herein:

- A. Demolition of two (2) existing gardner denver air compressor trains, air dryers, filters, valves, piping and associated appurtenances. Remove and dispose of offsite, all removed materials.
- B. Preparation of the area for subsequent reinstallation of the new equipment, including compressor piping connections and electrical tie-in preservation, equipment concrete foundations and/or modifications, anchors, baseplates, grout, piping & electrical connections, junction boxes and other necessary improvements..
- C. Furnish new materials and labor; and install two (2) new compressor trains in-kind, in accordance with this SOW.
- D. Furnish new materials and labor; and install two (2) new desiccant dryers, in-kind, and in accordance with this scope of work and accepted submittals.

5 Project/Work Elements

5.1 Scope of Work

The Contractor shall provide all the required work and support services, including any demolition, design, procurement, installation, commissioningrequired for the satisfactory execution of this scope of work. The Contractor shall include in these services the evaluation of the system functionalitywhile addressing such factors as compressed air quality, electrical integrity, pressure range, operating conditions, vibration, chemical compatibility, environmental considerations, maintenance and reliability, longevity, tagging requirements, suitable equipment foundations and anchoring, training, and commissioning.

The existing instrument air compressor system includes those items shown on Attachment A-3 Project P&ID. However, only the "clouded" items on this Attachment shall be demolished and replaced, reserving/saving the "tie-in" portions at the clouded interfaces for beneficial reuse and reattachment accordingly. Those portions of interconnect piping, electrical conduits, junction boxes that are demolished or that reside inside the "clouded" portions must be replaced in-kind according to this SOW and the P&ID accordingly.

Attachment **A-5 Basis of Design** shows a sample replacement system, as a possible solution to accomplish this SOW. The listed specifications shall represent the minimum

required performance characteristics of the required major components. In addition, the component Manufacturer (i.e., Quincy) shown in the Basis of Design shall not be construed as the only possible solution and is therefore to be understood as "Quincy or equal." Determination as to the acceptability of any proposed equipment or system(s) will be reviewed and accepted during the submittal process.

5.1.1 Instrument Air Compressor System

Provide new instrument air compressor systems to match existing in accordance with this SOW. Comply with reference standards and design codes as detailed within this SOW. Provide all labor and materials and tasks to deliver a complete operating system. Provide all the same functions as the existing instrument air systems and as specified.

5.1.2 Desiccant Dryers

The Contractor shall replace the existing instrument air dryer (26HDRY090), by duplicating the configuration of the compressed air dryer (26HDRY091) as shown on Attachment **A-3 Project P&ID**, including the upstream and downstream filters and valves.

5.1.3 Air Piping

The Contractor shall provide new piping, control valves, shut-off valves, pipe supports, and insulation as required. Piping shall be as required to reconnect to existing systems. Piping and valving shall be replaced with the same size, type, function, and material of construction as the existing piping. All metallic components and miscellaneous metals shall be 316 stainless steel unless otherwise specified. Connections shall be flanged, welded, or as accepted by the OC San Project Manager. Pickling and passivation applies to factory or shop welds. Custom flanges with elbows and short pipe links can be pre-made and field attached as needed. The Contractor shall replace all instrumentation as shown in Attachment **A-3 Project P&ID**.

5.1.4 System Appurtenances

The Contractor shall replace all appurtenances, separators, components, valves, control devices per Attachment **A-3 Project P&ID**.

5.1.5 Electrical and Instrumentation

The Contractor shall be responsible for disconnecting and reconnecting all new electrical equipment, control valves, and instrumentation; and to replace all conduits, flex conduits, and wiring from termination point to termination point so that there will be no spliced wiring. Provide additional conduit, supports, and equipment / instrument stands as necessary for a finished installation in accordance with the SOW or as approved by the OC San Project Manager Provide all components required to reconnect new items to existing systems. Supply and replace in kind all relief valves, control valves, temperature elements, pressure gauges as identified in this SOW or as necessary to provide a complete operational system.

5.1.6 Equipment Foundation Survey, Anchor Bolt Assessment

The existing concrete equipment foundations shall be re-used. Based on recent limited visual inspection of the anchor bolts, there is varying degrees of corrosion, some anchor bolt nuts do not have a full grip on the bolt threads due

to shimming plates, and the condition of the anchor bolts below the anchor nut is not visible, therefore the Contractor shall assess the condition of the anchor bolts after the equipment is removed and determine if they can be salvaged and reused. Assume for bidding purposes that all the anchor bolts shall be required to be replaced. Submit anchor bolt calculations prepared by a Professional Engineer licensed in the State of California.

5.1.7 Material Requirements

The Contractor shall supply the following major equipment according to this SOW. See Attachment **A-5 Basis of Design**.

- A. Two (2) Rotary Air Compressor System (40HP) Quincy QGD-40 or equal
- B. Two (2) Air Receiver Quincy T120V-200 or equal
- C. Two (2) Compressed Air Dryer Quincy QMD 230 or equal
- D. Two (2) Condensate Drain Quincy QMAT03 or equal
- E. Two (2) Compressed Air Filter Quincy QMF 280 or equal
- F. One (1) Two Unit Networking Kit Quincy or equal
- G. One (1) Compressor Selector Switch
- H. As Required (AR) Miscellaneous Appurtenances per this SOW
- 5.1.8 The Contractor shall isolate the instrument air compressor system from the plant air system in a safe manner that assures the uninterrupted operation of that system or ancillary detriment to it. Proper Lock Out Tag Out procedures shall be followed at all times.
- 5.1.9 All work shall be performed, and all components and materials shall be provided by the Contractor in accordance with this SOW. Provide all labor, elements, accessories, and appurtenances for a complete and fully operating system.
- 5.1.10 The new instrument air system shall be designed as an Essential Facility with Seismic Category of IV. The work shall be completed in accordance with the latest applicable codes and regulations.
- 5.1.11 Installation shall be in accordance with the applicable component or equipment manufacturer's requirements. The instrument air compressor manufacturer shall provide Certification of Proper Installation prior to operation and Certification of Proper Operation prior to final completion.
- 5.1.12 The Contractor shall be responsible for the removal of all debris and demolished items from the site(s) associated with this SOW. However, OC San reserves the right to keep all used, unused, and replaced parts. No materials or equipment shall be taken off the site, without OC San's written authorization.
- 5.1.13 OC San will provide limited space at Plant No. 2 for a laydown and staging area, to be determined. The Contractor shall include all expenses and costs related to accessing the laydown and staging area provided by OC San or for an offsite storage and laydown area if required.
- 5.1.14 OC San may assign inspectors and other staff to witness the Contractor's activities, including, but not limited to, installation, all readings taken, and all tests performed by the Contractor. The presence or lack of presence of OC

- San or OC San's representative does not relieve the Contractor from the requirements to perform all testing, all quality control and quality assurance, and other tasks required for the work. Submit test equipment and calibration certifications prior to taking readings and tests for OC San approval.
- 5.1.15 OC San has sampled various miscellaneous components in the surrounding area of the existing instrument air compressor system, including paint on the plant air pipe, air compressor, air flasks, and has not detected any surface lead. If the Contractor encounters any suspected hazardous waste or substances in the course of executing this SOW, they shall notify OC San Project Manager immediately.
- 5.1.16 The Contractor shall be solely responsible for protecting in place the equipment and area surrounding the existing instrument air compressor systems, appurtenances, and associated components and to prevent damage to it. The Central Generation facilities shall be maintained in operation during the execution of this SOW. The Contractor shall coordinate the work to avoid any interference with normal operations of plant equipment and processes. Always maintain access to the system for OC San Operations and Maintenance staff.
- 5.1.17 Downtime for power interruptions and other utility services requiring taps or connections shall be kept to a minimum. Interruptions are limited to a maximum of 3 hours each occurrence, and occurrences shall be limited to one per 24-hour period. Any work that blocks roadways, access to buildings or equipment, and parking lots shall require written acceptance from OC San prior to the work being done.
- 5.1.18 Written Shutdown requests shall be submitted to the OC San Project Manager or other designated OC San staff. Requests shall include a detailed shutdown plan and drawings identifying the system or equipment included in the shutdown request. The OC San Project Manager's written acceptance of shutdown requests shall be obtained twenty-one (21) calendar days in advance. The Contractor shall follow OC San's lockout/tagout/verify (LOTO) procedures for requesting LOTO isolation of equipment and working under LOTO conditions. OC San will provide tags and the Contractor shall provide a lockout device for each worker. If work on energized electrical systems is required, refer to the section entitled "Working on Energized Systems" of the OC San Contractor Safety Standards April 21, 2022 (Revision 10) provided as Attachment A-6 Contractor Safety Standards.

5.1.19 Testing and Commissioning

A. Factory Testing

The Contractor shall conduct factory testing to comply with applicable standards and required certifications prior to shipping of the compressors systems, or as acceptable to the OC San Project Manager. Submit results of the factory testing and required certification(s), if applicable, for approval prior to shipping to jobsite.

B. System Pressure Testing

The Contractor shall isolate and test all air piping, valves, nipples, instruments, gauges, and connections according to industry recognized best practices, and as acceptable to the OC San Project Manager.

C. Electrical and Instrumentation Testing

All new instruments shall be tested, and calibrated, prior to install in accordance with latest applicable Instrument Society of Automation (ISA) specifications and Scope of Work ttachments. Equipment tested may include some existing items to ensure a complete system test is accomplished. All new instruments, actuators, pressure gauges and/or transmitters shall be loop checked and commissioned to provide complete working system. The Contractor to perform loop checks of all above systems and OC San to witness the checks.

D. Commissioning

The following tests shall be required and/or complied with:

i. Operational Readiness Test [ORT]

Develop step-by-step procedures to systematically test every control circuit for all equipment, instruments, devices, and wiring installed or modified under this Contract where OC San has not provided a procedure. A procedure shall be submitted for each piece of equipment with a control schematic or I/O circuit. The procedure shall test equipment in LOCAL, HAND, and REMOTE MANUAL modes of operation. The Contractor shall match the format of the procedures provided by OC San, which includes a description of the action to be performed and anticipated result, the register number for the associated programmable logic controller (PLC) input and output point to be verified, action to be verified with comments, and signatures for the Contractor and the OC San Project Manager for each procedure step. Procedures shall use the appropriate testing method for instruments and devices, to verify that the circuit is operating properly and connected to the correct device.

ii. Functional Acceptance Test [FAT]

Develop step-by-step procedures to systematically test the functionality of all equipment and systems installed or modified under this contract where OC San has not provided a procedure. The procedure shall test equipment in local auto and remote automatic modes of operation. The procedure shall test all equipment and systems in remote automatic and auto modes to verify that the equipment and systems operate as described in the control strategies of the specifications or equipment specifications sections. The procedures shall describe the initiation of shutdowns and the expected results that are to be verified and shall test all startup and shutdown conditions for each piece of equipment and the system or process train to test the complete program functionality. The procedure shall include all testing scenarios. A procedure shall be submitted for each equipment and system. A system FAT shall be provided for all equipment that function

together with programming interlocks. The Contractor shall match the format of the procedures provided by OC San.

iii. Reliability Acceptance Test [RAT]

During the RAT procedures, the equipment and systems will be operated under various scenarios of normal operating conditions. Failures will be simulated to test the fail-over logic, equipment shutdown sequencing, and equipment startup sequencing. A test to check that the system can operate continuously in the intended manner for an extended period without failure. During the RAT, the system under test shall be operated within design parameters reflecting the day-to-day operation of the facilities for an uninterrupted period. The RAT shall not be performed until: (1) All FAT procedures and requirements for the commissioning package are complete; (2) All FAT punch list items have been signed off by the OC San Project Manager; and (3) Commissioning Phase 2 OR-FAT Completion Letter has been accepted by the OC San Project Manager.

E. Training

The Contractor shall provide a total of 8 hours of training maximum in accordance with the table shown below. Training shall be for the new instrument air compressor system and associated equipment, valves, and instruments. Training shall cover the following, at a minimum:

- 1. Equipment location and operational overview, including purpose and plant function of equipment.
- 2. Review catalog cut sheets, parts list, drawings, and all components of approved submittals and operation manuals. Show how to use spare parts, if any, and how to order parts.
- 3. Installation of specific equipment, identifying piping and flow options, valves and their purpose, and instrumentation including location of primary element and location of instrument readout.
- 4. Review safety references and discuss proper precautions and safety procedures around equipment and process facilities, including applicable fire safety and fire codes.
- 5. All modes of operation and procedures for startup, shutdown, leak test, normal operation, and emergency operating procedures including discussion of system integration and electrical interlocks, if any.
- Demonstrate the unit and perform standard operating procedures, rounds checks, startup and shutdown procedures including isolation for maintenance work and/or long-term nonuse.
- 7. Operations troubleshooting procedures.
- 8. Preventative maintenance.
- 9. Corrective maintenance.
- 10. Review Equipment Service Manual
- 11. Respond to questions

- i. Submit proposed training schedule and lesson plans, including trainer qualifications, to OC San two (2) months prior to training. At least one week prior to training session submit training manuals, handouts, visual aids, and reference material to OC San. OC San will not schedule or allow training until all items are reviewed and accepted by OC San. One (1) week following training session provide one complete set of lesson plans, training manuals, handouts, visual aids, and reference material. All documents shall be submitted in electronic format acceptable to OC San.
- ii. Training schedule shall be in accordance with the following table, or as otherwise required:

Session	Audience	Duration (hours)	Day and Time
1	Operations	2	Mon-Tue Days
2	Operations	2	Wed-Thurs Days
3	Maintenance	2	Mon-Tue Days
4	Maintenance	2	Wed-Thurs Days
		Total: 8	

6 Contractor Responsibility

6.1 General

As part of the Contract and Scope of Work, the Contractor shall perform the following tasks and provide OC San with the following items:

- A. The Contractor shall complete the Scope of Work as described and provide supply all parts, tools and equipment required to complete the Scope of Work.
- B. The Contractor is responsible to provide all materials and/or equipment, and other work to provide a complete operating system, and as specified herein.
- C. All components, parts or equipment found defective during testing and commissioning shall be replaced or repaired by the Contractor.
- D. The Contractor shall review and comply with all applicable requirements of Attachment A-6 OC San Contractor Safety Standards April 21, 2022 (Revision 10).
- E. The Contractor is responsible to provide all consumable supplies needed for testing and commissioning, including transportation, testing, safety equipment and personnel protection equipment.
- F. The Contractor shall be solely responsible for installing and maintaining all items in accordance with the manufacturer instructions until turnover of the work to OC San at the time of Final Completion.
- G. The Contractor shall be responsible for the repair or replacement in kind of any item damaged by the Contractor or it's Subcontractors without any cost or schedule

impact to OC San until turnover of the Work to OC San at the time of Final Completion. Repairs shall be completed prior to Final Completion.

- H. The Contractor shall be responsible to provide all packaging and shipping for transportation of parts and materials and equipment to and from the job site to ensure products and materials arrive at the site undamaged.
- The Contractor shall take measurements and record all test data during testing and commissioning and shall provide these measurements and data in a report to OC San.

6.2 Equipment Removal

The Contractor shall be responsible for the complete removal and offsite disposal of the legacy compressors (Qty 2), aftercoolers (Qty 2), desiccated dryer (Qty 1), refrigerated dryer (Qty 1), piping (misc.), electrical (misc.), instrumentation (misc.) and other appurtenances as required to fulfill the contract requirements.

6.3 Equipment Installation

The Contractor shall be responsible for installing the project elements per the SOW. Attachment **A-5 Basis of Design** outlines the minimum equipment requirements, and coupled with the project specifications as detailed within this SOW, will dictate the final installation requirements. All project elements shall be installed per the manufacturer's guidelines, and/or legacy design intent. OC San reserves the right to change, revise, or adapt the installation requirements as deemed appropriate. During the execution of work, proper controls shall be in place to protect workers from injury and from damage to OC San Facilities.

6.4 Compressor Setting and Installation

The Contractor shall install the compressors on its original concrete foundation and anchor it to the foundation per manufacturers specifications. The Contractor shall install all piping and connections to the existing piping, and install new valves, instruments, wiring, and appurtenances as required.

6.5 Permits/Licenses

The Contractor shall be responsible for coordinating all required permits, and permissions per the requirements as outlined herein.

The Contractor shall have a California licensed Professional Engineer to approve all applicable drawings and calculations.

6.6 Project Management and Planning

The Contractor shall manage the project execution according to the following:

A. Project Communications

A minimum of two (2) weeks prior to the start of work, a meeting with OC San staff, Project Kick-off Meeting, shall be held to establish appropriate contacts and review the Contractor's plan to implement this work.

Contract conferences shall be held on an on-call basis with OC San staff to keep OC San apprised of the job, review work in progress, and receive comments. Conferences shall be held at the OC San's offices or virtually (i.e. Microsoft Teams) as operational needs dictate. All notes and decision items shall be captured by the

Contractor and reported in electronic format within one week. The formal agenda shall also be submitted at least one week prior to each meeting. At a minimum, progress meetings will be Biweekly through-out the duration of the project.

B. Progress Meetings

The Contractor shall conduct recurring progress meetings. Attendees shall include the Contractor, OC San, OC San designated representative, if any, and manufacturers, vendors, and sub-contractors as needed for the meeting agenda. Progress meetings shall occur biweekly and have a minimum duration of 30 minutes. Additional meetings may be required for the progress of the project.

C. Design Services

The Contractor shall design the new instrument air compressors to fit on the existing foundations, and include the proper design of equipment anchorage, pipe routing, pipe connections, valving, electrical, instrumentation, and all other appurtenances to provide a complete, operational, reliable, and safe overall system solution.

The final design must bear the stamp of a professional engineer licensed in the State of California and include the anchor bolt calculations which follow the best practice recommendations for the type of compressor, speed, weight, vibrational characteristics, grout type, attachment techniques as well as all manufacturers' specifications and recommendations.

D. Field Survey and Verification

Before submitting fabrication and shop drawings, the Contractor shall perform a field survey to determine dimensions, materials of construction, joint types, fitting types, interconnections, electrical and instrumentation components, and to take other measurements necessary to accurately design, fabricate and install the equipment. Such survey and verification shall include, but not be limited to anchor bolts, foundations, and points of connection to existing piping, electrical systems, and instrumentation systems. Field verification shall include review of existing field electrical control panels where sensors and control signals are wired, types of electrical signals, and engineering units and range on each shall be field verified by the Contractor.

6.7 Rigging, Disassembly, Removal, and Installation

- A. The Contractor shall provide all equipment required for rigging, disassembly, removal of existing compressors, equipment and appurtenances, in addition to the installation of all new equipment. The Contractor shall follow all requirements of OC San Contractor Safety Standards April 21, 2022 (Revision 10) provided in Attachment A-6 Contractor Safety Standards and Attachment A-7 SOP-130 Crane Safety Program (Ver. 4).
- B. The Contractor shall provide trained staff all materials necessary to remove the existing compressors, equipment and appurtenances in addition to all newly installed equipment.

6.8 Transportation

- A. The Contractor assumes full responsibility and costs for all shipping, transportation, fees, duties and tariffs, scheduling, packing, handling, insurance, and other services associated with delivery of all equipment and goods deemed necessary under this project.
- B. The Contractor shall be liable for any damage that occurs during any transport of the equipment.
- C. Follow all State and Local laws regarding transportation of any demolished equipment.

6.9 Quality Assurance and Quality Control

The Contractor shall perform all work in accordance with approved written Quality Control Plan. The Contractor shall submit their Quality Control Plan to OC San for approval before the work begins. The Quality Control Plan shall include a description of the Contractor's procedures for calibrating test equipment, establishing work procedures, maintaining compliance to work procedures, monitoring quality of work, and training of staff. The Contractor 's procedures for taking and recording data, organization and retention of records, and transmittal to OC San for review and acceptance shall be included. All relevant ISO 9001 procedures and certifications shall be included with the Quality Control Plan, as applicable.

7 Project Schedule

- 7.1 The Contractor shall provide a Project Schedule within 14 days of the Notice to Proceed (NTP) and biweekly updated schedule during field work providing a 3-week look ahead. Schedule shall be a Gantt Chart or better. The purpose of the schedule shall be to ensure adequate planning and timely execution of the work by the Contractor, facilitate coordination and interfacing of the Contractor's work with others as needed, and establish a schedule to which subsequent periodic schedule updates will be compared to determine overall progress and performance toward satisfactory completion of the work.
- 7.2 The work activities comprising the schedule shall be of sufficient detail to assure adequate planning and execution of the work such that, in the judgment of OC San, it provides an appropriate basis for predicting, monitoring, evaluating, and recording the progress of the work. The schedule shall be detailed and show critical path activities, activity duration, predecessors and successors, and start and finish dates.
- 7.3 The schedule shall contain the following milestones: Notice to Proceed; mobilization; demolition; design; parts procurement; fabrication; construction start; testing and commissioning, specified contract milestones as applicable; and Final Completion.
- 7.4 In addition to milestones, the schedule shall show at a minimum the following tasks: field verification, submittal preparation and review, factory test, fabrication, material and equipment deliveries, installation, all connections to existing plant systems and equipment including interruptions, shutdowns, LOTO, and training.

7.5 The Contractor shall complete the project within 365 calendar days (52 weeks) from the date the Notice to Proceed is issued. A sample Project Schedule is provided below for reference purposes.

A. Sample Project Schedule

Milestones/Timeline	Deadline (Weeks from Kick-Off/NTP)	Review Period (Weeks)	Estimated Completion (Weeks)
Kick-Off Meeting (NTP)	0 Weeks	0 Weeks	0 Weeks
Submittal of Schedule	2 Weeks	2 Weeks	Week 4
Submittals Shop Drawings	12 Weeks	4 Weeks	Week 16
Parts Procurement	16 Weeks	20 Weeks	Week 36
Submittals Construction Schedule Fabrication Shop Drawings Quality Control Plan Installation, Operation, & Maintenance Manual Training Schedule Commissioning Plan	16 Weeks 24 Weeks 28 Weeks 30 Weeks 32 Weeks 34 Weeks	2 Weeks 4 Weeks 2 Weeks 2 Weeks 2 Weeks 2 Weeks	Week 18 Week 28 Week 30 Week 32 Week 34 Week 36
Installation	36 Weeks	12 Weeks	Week 48
Training	48 Weeks		Week 48
Commissioning	50 Weeks	2 Weeks	Week 52
Final Completion of Work	52 Weeks		

8 Resources Available

- Laydown and Staging Area (To Be Determined)
- Temporary Power (120V)
- Air Supply (90psi)
- Restroom Facilities

9 Submittals and Deliverables

9.1 Submittals

The Contractor shall provide fabrication shop drawings, product data sheets, and other submittals and procedures for review and approval by OC San for all components and parts prior to fabrication or procurement. The Contractor shall group submittals in sets to maximize efficiency. Provide detailed, to scale fabrication drawings of the compressor system and appurtenances that include dimensions, weld details, penetrations, installation details, and bill(s) of materials. Bill of materials shall show materials of construction and coating and lining details. Submit steel metallurgical certifications for structural steel and certification that codes and standards are being met. Shop drawings must bear the stamp of professional engineer licensed in the State of California.

Submit detailed product data sheets of all equipment, components, piping, hangers, valves and any other associated equipment. as required per the SOW. Provide shop drawings for all valving, piping, connection flanges, instrumentation, and electrical components, including connection diagrams for all control valves. Provide a process flow schematic showing all equipment, components, valves and instrumentation and "redline" the legacy P&ID. Provide submittals in digital, PDF format that is high resolution (1200 dpi or higher). Ensure all non-applicable data and optional functions that are not being provided are deleted or clearly crossed out. Provide submittals to OC San for review. OC San will return submittals to the Contractor within twenty (20) working days or sooner. The Contractor shall revise submittals as directed and resubmit as necessary.

The following are the minimum submittals required for this project, as detailed herein:

- A. Project Schedule
- B. Equipment Shop Drawings and Data Sheets
- C. Compressor System and Layout Drawings
- D. Electrical Schematics/Wiring Diagrams
- E. Foundation Design and or Modifications
- F. Material Submittals for structural steel members
- G. Installation, Operation, & Maintenance Manual(s)
- H. Equipment Service Manual(s)
- I. Commissioning Plan
- J. Training Agenda

9.2 Equipment Service Manuals (ESM)

After acceptance of all product and shop drawing submittals, the Contractor shall submit a draft ESM, also known as Installation, Operation, and Maintenance Manual, for review and approval covering all mechanical, electrical, and instrumentation devices, and installation and operational details. Draft ESM shall be submitted 120 days prior to the start of Phase 1 – PRE-ORT. The Contractor shall revise, replace, remove and/or add documents to correct deficiencies and resubmit Final ESM prior to the start of Phase 2 – ORT and FAT for OC San review and approval. The Final ESM must be accepted by OC San 30 days before the start of Phase 2 - ORT and FAT. Revision to Final ESM may include changes necessary to reflect "as-built" conditions. ESM shall be provided in digital, PDF format that is high resolution acceptable to OC San. Ensure all non-applicable data and optional functions that are not being provided are deleted or clearly crossed out (i.e. Non-relevant configurations, sizes, materials, and dash numbers often shown on manufacturer datasheets). ESM shall include data sheets, warehouse spare equipment list, approved shop drawing submittals, installation, operation, and maintenance manuals including standard operating procedures for startup and shutdown of the compressors, supplemental drawings and instructions, and as-built information. Installation, operation, and maintenance manual section of ESM shall include recommendations for installation, adjustment, calibration and troubleshooting, step by step equipment specific procedures for starting, operating, and stopping equipment, preventative maintenance procedures, overhaul instructions, drawings, complete parts lists and recommended spare parts, parts ordering information and special tools list.

10 Staff Assistance

The Contractor will be assigned a single point of contact on this project. Any meetings and/or correspondence related to this project shall be scheduled and approved by the OC San Project Manager.