AMENDMENT NUMBER FOUR
CONTRACT MA-280-20010615
FOR
COGENERATION/CENTRAL UTILITY PLANT OPERATION, MAINTENANCE & ENVIRONMENTAL COMPLIANCE SERVICES

This AMENDMENT is made and entered into as of the date fully executed by and between the County of Orange, a political subdivision of the State of California ("County"), and Sterling Energy International, Inc.(the "Contractor"), which are sometimes individually referred to as "Party" or collectively referred to as the "Parties".

RECITALS

WHEREAS, the Parties entered into Contract MA-280-20010615 for Cogeneration/Central Utility Plant Operation, Maintenance & Environmental Compliance Services, effective January 1, 2020 through December 31, 2022, in the amount not to exceed $11,799,206.99 (the "Contract"); and,

WHEREAS, pursuant to Amendment Number One, the Parties increased the prevailing wage rates and replaced Attachment B Contractor's Pricing, Section 3; and

WHEREAS, pursuant to Amendment Number Two, the Parties increased the prevailing wage rates and replaced Attachment B Contractor's Pricing, Section 3; and

WHEREAS, pursuant to Amendment Number Three, the Parties renewed the contract for two additional years, effective January 1, 2023 through December 31, 2024, with a new Contract amount not to exceed $8,611,667.13 and replace Attachment B Contractor's Pricing, Section 3; and amend various sections of the Additional Terms and Conditions to conform with County standard language; and

WHEREAS, the Parties now desire to extend the Contract for three (3) year(s) effective January 1, 2025 through December 31, 2027, with a new Contract amount not to exceed $14,886,737.31; include additional items to the scope of work; replace Attachment B Contractor's Pricing, modify the CUP operating hours; update Attachment B, Section 3 Subcontractor(s) for current subcontractors; update the Parties' notice information and modify various sections of the County's General Terms and Conditions.

NOW THEREFORE, in consideration of the mutual obligations set forth herein, the Parties agree as follows:

AMENDMENT TO CONTRACT ARTICLES

1. Section N of the General Terms and Conditions shall be amended to read in its entirety as follows:

> N Performance Warranty
> Contractor shall warrant all work under this Contract, taking necessary steps and precautions to perform the work to County's satisfaction. Contractor shall be responsible for the professional quality, technical assurance, timely completion and coordination of all documentation and other goods/services furnished by the Contractor under this Contract. Contractor shall perform all work diligently, carefully, and in a good and workmanlike manner; shall furnish all necessary labor, supervision, machinery, equipment, materials, and supplies, shall at its sole expense, unless otherwise directed by County, obtain and maintain all permits and licenses required by public authorities, including those of County required in its governmental capacity, in connection with performance of the work. If permitted to

subcontract, Contractor shall be fully responsible for all work performed by subcontractors.

2. Section 67 of the Additional Terms and Conditions shall be amended to read in its entirety as follows:

   67 OEM Equipment Maintenance Standard
   The Contractor agrees to maintain all equipment according to the original equipment manufacturer (OEM) specifications unless otherwise directed by County. The Contractor further agrees that all components will be OEM components. At the termination of the Contract the Contractor guarantees that equipment will meet OEM equipment certification standards.

3. Section 2 of the Additional Terms and Conditions shall be amended to read in its entirety as follows:

   2. Term of Contract
   This Contract shall be effective January 1, 2025, through and including December 31, 2027, upon execution of all necessary signatures unless otherwise terminated by County.

4. Section 4 of the Additional Terms and Conditions shall be amended to read in its entirety as follows:

   4. Contract Amount Not to Exceed
   Contract Amount not to exceed $14,886,737.31

5. Attachment-A, Scope of Work shall be replaced in its entirety as attached hereto.

6. Section 75 of the Contract's Additional Terms and Conditions shall be amended to read in its entirety as follows:

   75. Notices
   Any and all notices, requests, demands and other communications contemplated, called for, permitted, or required to be given hereunder shall be in writing with a copy provided to the assigned Deputy Purchasing Agent (DPA), except through the course of the parties' project managers' routine exchange of information and cooperation during the terms of the work and services. Any written communications shall be deemed to have been duly given upon actual in-person delivery, if delivery is by direct hand, or upon delivery on the actual day of receipt or no greater than four (4) calendar days after being mailed by USPS certified or registered mail, return receipt requested, postage prepaid, whichever occurs first. The date of mailing shall count as the first day. All communications shall be addressed to the appropriate party at the address stated herein or such other address as the parties hereto may designate by written notice from time to time in the manner aforesaid.

   County: Orange County Public Works/JWA Maintenance
   Attention: Robert Shipp
   3180 Airway Avenue
   Costa Mesa, CA 92626
   Phone: 714-667-1636
   Email: Robert.Shipp@ocpw.ocgov.com

cc: Orange County Public Works/Procurement
Attention: Derek Savosh, DPA
601 N Ross St.
Santa Ana, CA 92701
Phone: 714-667-9668
Email: Derek.Savosh2@ocpw.ocgov.com

Contractor: Sterling Energy International, Inc.
Attn: Michael O'Leary
3001 Red Hill Avenue #6-201
Costa Mesa, CA 92626
Phone 949-248-2917 Mobile 760-727-7711
Email: MOLeary@Sterling-Energy.com

7. Attachment A-1 Vendor's Proposal Revised 101119, Paragraph 3 of the attendance schedule on page 50, and the Table labeled 6/1/19-6/28/19 on page 51 shall be deleted and amended to read in its entirety as follows:

   A minimum of one knowledgeable Contractor member with the necessary skill sets and experience to operate the CUP shall be on site during the following hours:

Days	1/1/2025 - 12/31/2027
Monday - Fridays	5:00AM - 11:30PM
Weekends and Holidays	5:00AM - 11:30PM

8. Attachment B, Contractor's Pricing shall be deleted and replaced as attached hereto.

9. Attachment C, Subcontractor(s) shall be deleted and amended to read in its entirety as follows:

Subcontractor Name	DIR #	License Number	Location Address	Division of Work or Trade
ABB Inc. 800-533-5885	1000030652		29713 Network Place Chicago, IL 60673	GE Zenith support and spare parts supply
Air Quality Engineering, Inc. 909-396-2562	1001012967		1618 French Street Santa Ana, CA 92701	Perform CGA and CO Quarterly emissions testing also RATA and Source testing by schedule
Broad U.S.A. Inc. 201-678-3010	1000533737		401 Hackensack Ave., Ste. 503 Hackensack, NJ 07601	Service of ACH chillers
Carrier Commerical Service 800-574-9267	1000017325		2478 Peck Road City of Industry, CA 90601	Perform Quarterly inspection and servicing of CCH chillers
Cummins 562-551-5232	1000057943		1939 Deere Avenue Irvine, CA 92606	Engine major overhaul and OEM engine spares
DeMaria 562-663-9000	1000048689		7048 Marcelle Street Paramount, CA 90723	Perform Generator rewind, rebuild and testing of system resistance

Drive Solutions 760-525-4133	1000048726		1119 S Mission Road #231 Fallbrook, CA 92028	Annual variable frequency servicing
Mitsubishi Electric Power Products, Inc. 760-745-8562	1000051348		1215 Pacific Oaks, Suite 106 Escondido, CA 92029	UPS System Service and testing support
MSA 800-672-4678	1001106836		1000 Cranberry Woods Drive Cranberry Township, PA 16066	ChillGard service and calibration
Nalco 800-856-6128	1000024292		211 E. Dominguez St. Long Beach, CA 90810	Perform Monthly audit testing of water chemistry and chemical supply
OC Scaffold 714-637-6010	1000012271		121 E. Meats Avenue Orance, CA 92865	Inspections of scaffold rentals
Ocean Blue Environmental Services, Inc. 800-990-9930	1000002621		925 West Esther Street Long Beach, CA 90813	Hazardous waste clean up and disposal
Orange County Welding 714-641-3030	1000040524		2021 South Eastwood, Unit E. Santa Ana, CA 92705	Perform minor fabrication repairs and speciality machining of components
Power Systems Testing 714-542-6089	1000000898		600 South Grand Ave, Suite 113 Santa Ana, CA 92705	Switchgear, transformer relay inspection, testing and maintenance
Trademark Hoist and Crane 909-455-0801	1000030984		1369 Ridgeway Street Pomona, CA 91768	Lodestar electric chain hoist service and inspection

10. All other terms and conditions of the Contract, except as specifically amended herein, shall remain unchanged and with full force and effect.

IN WITNESS WHEREOF, the Parties hereto have executed this Amendment to the Contract on the dates shown opposite their respective signatures below.

STERLING ENERGY INTERNATIONAL, INC. *

Signed by:			
Lawrence P Straight 0B015D95BF3540A...	Lawrence P. Straight	President	11/13/2024 | 4:30 PM PST
	Name	Title	Date

Signed by:			
Phyllis Straight 783925E3B97C4BB...	Phyllis E. Straight	Chief Financial Officer	11/13/2024 | 4:40 PM PST
	Name	Title	Date

COUNTY OF ORANGE, A political subdivision of the State of California

COUNTY AUTHORIZED SIGNATURE:

		Deputy Purchasing Agent	
Signature	Name	Title	Date

APPROVED AS TO FORM:
County Counsel

By: DocuSigned by: Christine Nguyen
26F9D76C929A49E...

Name: Christine Nguyen

Date: 11/13/2024 | 6:12 PM PST

* If the Contractor is a corporation, (2) two signatures are required: one (1) signature by the Chairman of the Board, the President or any Vice President; and one (1) signature by the Secretary, any Assistant Secretary, the Chief Financial Officer or any Assistant Treasurer. The signature of one person alone is sufficient to bind a corporation, as long as he or she holds corporate offices in each of the two categories described above. For County purposes, proof of such dual office holding will be satisfied by having the individual sign the instrument twice, each time indicating his or her office that qualifies under the above described provision. In the alternative, a single corporate signature is acceptable when accompanied by a corporate resolution demonstrating the legal authority of the signator to bind the corporation.

Attachment A
Scope of Work

Minimum Qualifications

Contractor must meet or exceed the following requirements:

- Currently or within the previous three (3) years' operating cogeneration plants. Operating plants within C.A.R.B. and SCAQMD regions is highly desired.
- Five (5) years of experience in power generation and central utility plant operations.
- Prior experience working with parts and service subcontractors who provide certified parts and service for the various equipment at the cogeneration plant (e.g., Cummins, Miratech, and Trace, amongst others).
- Contractor's project team shall collectively possess thorough knowledge of local, state, and federal laws regulating power generation, and operation of central utility plants and their applications at JWA.

I. Introduction

Services to be provided shall include the following tasks:

1) The operation and maintenance of: 1) the CUP power generation equipment while achieving compliance with conditions contained in the equipment manufacturers and guarantees and emissions limits specified under the SCAQMD permit, 2) the chilled water system, and 3) the Medium voltage distribution system inside the Central Utility Plant (CUP) and from the utility point of connection thru the step down transformers in the Terminals and Parking Structures to relays and controls on substation 480V distribution breakers. This includes, but is not limited to, the supply support and procurement, remote systems monitoring, equipment warranty monitoring, emissions equipment monitoring and service, necessary upgrades, preventative maintenance and periodic servicing including non-routine operational medium-voltage protection setting & setpoint determination & changes, fuel and urea input and management, equipment overhaul and/or repair, and provision of plant operation related advice.
2) Support of the P404 Project

II. CUP Description

The CUP can provide over 5.25 Megawatts of electrical power and 2250 tons of chilled water. The plant was designed with an "n+1" philosophy. Any one of the major components, such as a generator, chiller, or main pump, can be out of commission at any time and the plant can still be able to provide electrical power and chilled water, even without any utility supplied power.

The plant will have a tie into a 12KV Southern California Edison (SCE) electrical service, metered at Time of Use – 8 (TOU-8) rate schedule, Standby rate schedule (Schedule), and Departing Load (Schedule DL-NBC and Schedule CGDL-CRS).

The CUP includes the following major components:

1. Power Generation and Distribution
   a. Four (4) Cummins QSV91, 1750 KW, 12KV Natural Gas generator sets
   b. Four (4) Cummins Generator Panel Controls
   c. Engine Control Switches (ECS)
   d. Fully automated GE Zenith Paralleling Switchgear and transfer switches
   e. All medium-voltage protective relays & settings (CUP & Substations) and Terminal Substation 480V Main & Tie breakers protective relays & settings.
2. Emissions Control and Monitoring
   a. Four (4) emission control systems from Miratech consisting of:
      - Oxidation Converter and Catalyst
      - Injection and Mixing Section

- SCR Convertor and Catalyst
- Urea system including storage tank, Reactant Booster Pump Skid and Reactant Injection & Analyzer System
- Auxiliary devices including tank level monitoring device

b. Continuous Emissions Monitoring Systems (CEMS) from Trace and auxiliary devices including natural gas sub-meters

3. Chilled Water Production
   a. Three (3) Carrier 750 ton Centrifugal Chillers
   b. Two (2) Broad 535-ton Single Effect, Hot Water Absorption Chillers
   c. One (1) Carrier 125-ton Air-Cooled Package Screw Chiller
   d. Pumps, Control Valves, and Variable-Frequency Drives (VFDs)
4. Heat Rejection
   a. Evapco USS-428-1248 Four Cell Stainless Steel Cooling Towers
   b. Eight (8) Engine Exhaust Heat Exchangers
   c. Four (4) Engine Water Jacket Plate Heat Exchangers
   d. Four (4) Engine Auxiliary Water Plate Heat Exchangers
   e. Pumps, Control Valves, and VFDs
5. Engine Room Space Cooling
   a. Two (2) Westair WMC-450P Direct Evaporative Coolers
   b. Three (3) Greenheck Exhaust Fans
6. Electrical Switchgear Room Cooling
   a. Three (3) Carrier Split Systems
7. Electronic Control Systems
   a. GE Zenith, generator loading/unloading and synchronization
   b. Trace, CEMS
   c. Cummins
   d. Siemens Apogee, Chilled Water, Cooling Water, Hot Water Systems Control
8. Sewage Ejection Pump Station
   a. Dual Pump Sump System – Site does not have gravity sewer drainage
9. Fire Alarm
   a. Edwards EST3
10. Alarm and Access Control (AACS)
    a. Software House C-Cure
11. Closed Circuit TV (CCTV)
    a. Pelco Endura
12. Universal Power Supply (UPS) Units
    a. CUP Emergency Lighting (Online Power Powerwave UPS)
    b. CUP Electronic Control System (Eaton 9355 UPS)
13. The major sub-systems that make up the CUP are as follows:
    a. Chilled Water System:
       - The purpose of the chilled water system is to provide chilled water to the Airport's (Terminals A, B, and C and CUP) air conditioning systems.
       - The CUP Chilled Water (CHW) system is a variable-primary flow arrangement.
       - The chilled water system consists of two (2) 535-ton Broad Absorption Chillers, three (3) 750-ton variable flow Carrier Centrifugal Chillers, one (1) 125-ton Carrier Air-Cooled Screw Chiller, and seven (7) Chilled Water Pumps. All centrifugal chillers and chilled water pumps are VFD driving and controlled by the Siemens Apogee panels.
         - The absorption chillers act as a pre-cooler for the centrifugal chillers and are piped in a "slipstream" configuration upstream of the centrifugal chillers. When thermal loads in the Terminal permit, the absorption chillers can provide all of the chilled water cooling requirements.
         - During low electric and thermal load requirements (less than 100 tons), the screw chiller will operate.

b. Condenser Water System:
   - The purpose of the Condenser Water System is to provide cooling water for the absorption and centrifugal chiller condensers and for removing gen set waste heat from the Cooling Water System.

c. Cooling Water System:
   - The purpose of the Cooling Water System is to provide cooling for the engine generator jacket water and auxiliary water heat exchangers. The Cooling Water System source is Condenser Water Return. The Cooling Water System can remove some, or all, of the heat recovered from the generators and their exhaust.

a. Hot Water System:
   - The purpose of the Hot Water System is to use the engine generator heat to power the absorption chillers. Water is flowed through the main water jacket heat exchangers and then the exhaust heat exchangers before reaching a temperature of 230 degrees. It is then either used by the absorption chillers to produce chilled water or dumped directly to the cooling towers.
   - The Hot Water System is a closed loop water system.

b. Electronic Control Systems:
   - The purpose of the electronic control systems (GE Zenith, Trace, Cummins, Siemens Apogee) is to control power production, chilled water supply, and monitor emissions.
   - Each of the four systems will have a workstation in the CUP control room.
   - Each system will have access to it via a VPN connection through the JWA IT network.
   - The Siemens Apogee System will have the capability of mapping all of the points contained in the GE, Trace, and Cummins Systems.

Electrical Equipment Support: Terminal & Parking Complex 12-kV cables, switches, transformers and electrical control systems.

In addition to the components and sub-systems contained within the CUP site, all 12 KV electrical cable, switches, and 12kV/480V transformers throughout the Terminal Complex and Parking Structures will be covered under this agreement. There are currently thirteen (13) 12kV/480V transformers in operation across Terminals-A,B,C and their parking structures.

This Operations and Maintenance agreement will also provide **as needed** electrical equipment support and services on a time and materials basis for the electrical distribution systems and panels throughout the parking structures and terminal complex to the 12KV/480V transformers. This provision also includes controls applicable to 480V circuit breakers included in the prospective microgrid load shed scheme as described below.

The current Phase-1 of the P404 Capital Improvement project will modernize the JWA Terminal complex electrical distribution system which includes replacing aging switchgear and unit substations (5-total, 3-double-ended), providing provisions for microgrid/load shedding controls and monitoring system, and modifying emergency distribution systems. The current MSG, and Five (5) unit substation to be replaced: one in Terminal A, two in Terminal B, one in Parking A2, and one in Parking B2. The 12kV distribution for the terminal will be refed from the new MSG switchgear to the unit substations. In addition, the existing emergency systems would be upgraded to replace old ATS in Terminal A and Terminal B and to separate emergency (life safety) loads from other non-emergency loads.
This agreement includes Commissioning and warranty/service support of the P404 Phase-1 project. Commissioning and warranty/service support work shall be as directed by the County Contract Manager. Commissioning support work has commenced prior to the date of this agreement with:

- Design Review of P404 Phase-1 15% SD plans and long-lead equipment procurement package
- Support of P404 E.O.R. Phase-1 design related to CUP existing conditions.
- Preliminary (outline) Phase-1 Commissioning work-sequence planning.

Commissioning support work anticipated as part of this agreement:

- Participation as an on-site Owner's rep site/CUP-Operator Commissioning Authority in collaboration with the OCPW Commissioning Authority where the Roles and Responsibilities of each party shall be developed during P404 Phase-1 design and specified in the P404 Project Division-1 Specification.

Given that addition of Microgrid/load-shedding controls will effectively extend the controlled perimeter of the CUP to the remote Terminal and Parking Structure Substations, Warranty/Service support work currently limited to the CUP 12kV equipment and relay controls will be expanded to include substation 12kV and 480V relay controls as part of this agreement. Warranty/Service support for 12kV and 480V gear & breakers in new electrical substations provided by P404 Phase-1 shall remain with Airport Maintenance.
Further, it is anticipated that:

- Warranty-support by both the CUP Operator & Airport Maintenance would relate to warranties provided by the equipment manufacturers and the P404 construction team.
- Separate Substation service contracts would be maintained by Airport Maintenance and the CUP Operator, respectively, for substation breakers and relay control equipment.
- Emergency Generator/ATS Service contracts would be maintained by Airport Maintenance with the CUP Operator responsible for any remote monitoring or control of the Generator/ATS equipment related to load-shed/loss of power scenarios.

Future System Integration:
Phase-2 of the P404 capital improvement project consists of a solar photovoltaic (PV) system capable of producing 2.8 Megawatts of power that may feed a Battery Energy Storage system (BESS) capable of storing 6 Mega Watt-hour of energy tied to the John Wayne Airport (JWA) Central Utility Plant (CUP). The project also replaces the CUP (4) 1.75MW Cummins Gas Engine/Generators with potentially fewer engines at lower-rated electrical & thermal power output complimentary to the JWA Terminal & CUP thermal & electric loads and accounting for PV/BESS sizing if the BESS is included in Phase-2.

Future design, construction, and commissioning contracts will provide for major changes to the CUP equipment and recommissioning of the CUP control system to accommodate the battery and solar PV system; however, within the scope of this agreement the CUP operator - at the direction of the County Contract Manager will provide any necessary decommissioning support or operational transition services of the P404 Phase-II project.
As required, hours of this time and material agreement may also be dedicated to consulting and advising the Airport on power generation, power systems design and integration, and general utility planning and usage during P404 Phase-I electrical system connection periods. These hours are to be directed at the request of the County Contract Manager.
See the following Division of Responsibility table for delineation of roles and responsibilities for the JWA CUP Electrical & Substation Equipment.

JWA CUP Electrical & Substation Equipment	Operate	Monitor	Maintain	Advise
• All Electrical Gear Inside the CUP	OC		OC	
• New MSG located @ the CUP	OC		OC	
• All 12kV Cable @ JWA	OC		OM	OC
• All 12 kV Disconnect Switches @ Transformers	OC	OC	OM	OC
• All 12kV/480 Transformers	N/A	OC	OM	OC
• All 480V Electrically Operated Substation Breakers	OC		OM	OC
• All 480V Molded Case Substation Breakers (Shunt Trip/Manual)	OC/OM		OM	OC

• All 480V ATS Equipment	OM	OC	OM	OC
• All 480V Emergency Generators	OM	OC	OCPW	OM
• All 480V Cable	OM		OM	OC
• Microgrid Control System and All Associated Devices	OC		OC	
• Microgrid Control System network	OC		OC	
PHASE II				
• All Process Systems inside the CUP	OC		OC	
• Solar Panel Power System	OC		OM	OC
• BESS Equipment	OC		OM	OC
• Solar/BESS Control System	OC		OC	

OC = CUP Operator OM = JWA Maintenance OCPW = Orange County Public Works

Contractor's Compliance Requirements

It will be the Contractor's responsibility to operate and maintain the plant in a fashion that is compliant will all emissions permits. Negligent operation and maintenance of the plant that leads to either a violation or any of the emissions permits or excessive utility import will be assigned as a deduction to Contractor's invoice at the rate of 100% of the penalty. Unforeseen (act of God) events outside of the control of the Contractor that cause emissions violations or excessive utility import are not considered the responsibility of the Contractor.

III. Operational Cost Optimization

The generators are capable of operating on a 24/7 basis, independent of the Terminal Complex cooling loads or SCE rate and demand schedules. County understands that the most efficient and economical way to operate the plant may change based upon the electrical and chilled water demand changes and the cost variances from importing electricity from SCE at various time of the calendar year.

At any time during the contract period, Contractor can formally propose recommended changes that may result in a net cost reduction in KWH and KW demand cost to County. Items that can be considered for operational modification include, but are not exclusive to:

1. Generator shutdown
2. Generator loading/unloading sequencing
3. Generator load levels reset by time of day or date
4. Chilled water supply temperature set point or differential pressure set point resets
5. Air Handler discharge temperature set point reset
6. Staffing quantity changes

Additionally, at any time during the contract period, County can direct Contractor to make operational and/or maintenance changes that may best service the needs of the County and direct that Contractor make related staffing level adjustments. Items that can be considered include but are not exclusive to items #1 through #6 above.

Any changes which could involve conditions that could result in the CUP operating outside of SCAQMD permit specifications or that violate any Federal, State, or local environmental ordinances, will not be considered.

Because of the cost variances in SCE electricity import costs during the Summer and Winter seasons and the cost differential of On-Peak, Mid-Peak, and Off-Peak Energy Rates within the TOU-8 Rate Schedule, Contractor shall submit a staffing plan as part of the proposal that details the positions and hours that will be staffed that will best meet the needs and cost efficiency goals of the Airport.

Contractor shall prepare a monthly report showing detailed cost summaries for energy productions. These documents will contain data related to monthly KW production, monthly KW SCE Import, and monthly natural gas usage KWh the airport is spending for energy.

IV. Parts and Consumable Supplies

1. Contractor shall recommend stock levels of all critical spare parts and consumable items necessary to maintain the gen sets for expected usage of 12 months, based on its experience.

2. Contractor must monitor stock levels and replenish parts taking into account realistic procurement and transportation lead times, so as to avoid a condition of a zero balance of any normally stocked item unless otherwise directed by County. The parts to be managed include the filters, acids, coolants and lubricants and any other supplies and/or parts that could reasonably be expected to fail within one year, such as hoses, belts, clamps, fuel injectors, switches, cables, connectors, etc. Contractor's supply management shall be consistent with County policies and procedures for requesting, receiving, storing, inventorying and issuing of supplies. County will provide storage space for these spare parts and will reimburse the Contractor for procured parts.

3. Contractor will provide as part of the proposal examples of innovation and resourcefulness in parts and consumable supplies procurement and examples of innovative methods applied to reduce parts cost and reduce supply consumption.

V. Performance Monitoring and Testing

A monitoring program shall be established to compare the performance of major equipment and overall system with the vendor's guaranteed performance specification. This comparison will be the basis for analyses of deviations and proposals for remedies. A reference test standard shall be defined and plant performance testing shall be initiated to test performance in comparison with a standard. Contractor may develop a reporting format or utilize one provided by Subcontractor.

1. Test Items and Test Duration: Monitoring device calibration shall be performed annually. Testing shall be performed annually. The list of monitoring and test items shall be included in the proposal and follow the general testing standard and recommendations provided by suppliers.

2. Measuring Points and Location: Prior to performance monitoring, the availability of the measuring equipment shall be verified and calibrated to an acceptable tolerance. A list of measuring points will be provided by Contractor in order to conduct the monitoring and testing during the operation period. Contractor may develop a list by referring to the information provided in the manuals and collaboration with County's Project Manager.
   The list of measuring points shall include a list of all instruments that are available at site and are useful for the monitoring, and detailed drawings in order to study the location of measurements and the possibility to install portable devices during the monitoring.

3. Instrumentation and Measurement Uncertainty: An uncertainty analysis shall be performed prior to the test. The performance test code always establishes a limit for each required measurement uncertainty. A post-test uncertainty analysis should be performed to assure that the actual test has met the requirement of test code. The overall test uncertainty will be calculated in accordance with defined procedure and by the specified standard.

4. Computation of Results: Determine the Major equipment Key Performance Indicators (such as power output and heat rate) at specified conditions. Recorded data used for computation of the results is the average value of the readings during a single test run. Instrument and other corrections may be necessary to apply before using these data.

5. Results Evaluation: The results of the monitoring will be used in calculating the different parameters such as fuel flow and efficiency. All results will be adjusted based on correction curves. These correction curves are normally included in the obligation of the supplier to submit, but, if not available, they can to some extent be replaced by standard correction curves form different standards. During performance monitoring, an overall check of the status of actual measuring shall be made before any decision on more detailed measuring is taken. Only if recorded measurements

indicate differences and/or uncertainties in values, a more detailed measuring program shall be elaborated for a renewed calculation of efficiency.

Deviations in the efficiency can normally be deduced from deviations in important parameters. These parameters also give an indication of the source of deviation. Therefore, very accurate measurements and detailed calculations taking all possible parameters, e.g. according to DIN 1942, are not required. Normally, readings from the fixed installed instruments are sufficient and the result will be approximate figures for efficiency.

VI. Warranty

1. Monitoring:
   a. Contractor will recommend methods to monitor the performance of the gen sets, ensuring the operating temperatures, oil pressure, and any other measurement data (as necessary) are within the expected range of normal and shall perform all periodic checks and preventative maintenance, and shall perform periodic servicing other than that which may be the responsibility of the equipment manufacturer or his representative under provisions of a warranty. In such cases, when servicing is performed under a manufacturer's warranty or a separate vendor's contract, the Contractor shall monitor and serve as a liaison for County and shall make record of such servicing. Contractor shall provide all consumable supplies necessary for servicing. Contractor shall forecast to County when such servicing will be required and shall make appropriate record of when the servicing has been completed.

   b. Contractor shall monitor applicable equipment warrantees, ensuring no warranty provisions are violated and shall coordinate with County, any warranty claims with the equipment vendor. Contractor shall ensure that all operation and services of warranted equipment is in agreement with the applicable warranty provisions.

VII. Reporting Requirements

1. Contractor shall list, as outlined above, reports that will be generated, including their frequencies, to include operating logs, forecasts of gen-set service, reports of repairs needed and completed, service logs, fuel consumption reports, recommendations and requests for purchase of parts and components and/or consumables, monthly KW production, monthly KW SCE Import, monthly natural gas usage, etc.

2. A monthly projection of natural gas required to run the CUP for the upcoming month, based upon mutually agreed climatologically data, will be required to be turned into County Project Manager, or designee, by the 15th day of each month.

3. Contractor shall work under technical direction of County Project Manager or his designee. Contractor shall report immediately to County Project Manager any electrical emergency or potential safety hazard.

4. Contractor shall notify County Project Manager and the Airport Service Desk at (949) 852-4004 of any equipment malfunction of any component of the CUP Description listed in Section II of the Scope of Work within three (3) hour of Contractor's observation/alarm notification of the equipment failure.

VIII. Quality Control

Contractor shall provide a schedule to meet with County Project Manager, or designated representative. Mutual effort shall be made to resolve any and all problems identified. County will monitor Contractor's performance in each functional area under this Contract and reserves the rights to use whatever additional surveillance procedures are deemed appropriate. If Contractor fails to perform according to the performance standards, a Notification of Contract Deficiency Report will be issued by County Project Manager. Contractor shall explain, in writing, why performance was not satisfactory and how recurrence of the problem will be prevented in the future.

County reserves the right to have an independent third party audit Contractor operations and prepare

and/or review reports and documentation. Contractor shall be responsible for all Quality Assurance/Quality Control (QA/QC) reporting and for all other reports required by SCAQM and others.

IX. Training

1. Contractor will include specific internal combustion engine/generator, absorption chiller, centrifugal chiller training, or medium voltage (12 KV) system training possessed by Contractor's staff being proposed to operate the CUP.
2. Contractor will propose a training schedule for Contractor's staff that do not have sufficient training in a designated discipline.

X. County's Obligations

County shall provide reasonable means of access to the site. County shall coordinate the operation of its existing facilities at the Project Site to permit Contractor to perform the work required under the Contract. Contractor shall be permitted to control and/or operate all facilities or equipment necessary to perform the services herein described at a time and date approved by the County.

County shall be responsible for the following:

1. During the term of this Contract, County shall not perform any maintenance on the equipment or otherwise modify the equipment or any equipment related to the Project Site in any way that would alter, modify or change the configuration or operation of the equipment as originally installed without mutual agreement.
2. In the event of an emergency, County may immediately shut down operation of the equipment when there is an appreciable risk that continuing operations will result in significant damage to equipment, caused personal injury or will result in any violation of any applicable permits or laws relating to the operation of the equipment.
3. County assumes primary responsibility in notifying Contractor in the event of an emergency. If an emergency occurs after Contractor's normal business hours, County shall contact Contractor's After Hours Response Line. If an emergency occurs during normal working hours, then County shall contact Contractor.
4. Fire Sprinkler System water up to the point of connection at the fire main.
5. Fire System Backflow at the northwest corner of the CUP site.
6. JWA IT "Shed" located at the northwest corner of the CUP site.
7. Fire Alarm System components and operation.
8. AACS System components and operation.
9. CCTV System components and operation.
10. Emergency Phone System components and operation.
11. Daily custodial cleaning of the control room and restroom. Contractor will be responsible for the removal and disposal of all trash and debris.
12. Landscaping and Landscaping Maintenance.

Attachment B
Contractor's Pricing

1. Compensation:

This is a time and materials, not-to-exceed Contract between County and Contractor for Cogeneration/Central Utility Plant Operation, Maintenance and Environmental Compliance Services as set forth in Attachment A, "Scope of Work." Labor rates will be paid according to negotiated rates conforming to prevailing wage tables published by the State of California. Subcontracts and materials shall be passed through and paid at Contractor's cost plus any agreed percent mark-up.

Contractor may schedule required maintenance and order parts or services up to $5,000.00 without written direction from County; however, parts and services totaling over $5,000.00 must be approved ahead of time in writing by County Project Manager. The cost of the parts and services will be reimbursed to Contractor as part of the monthly invoice. County reserves the right to subcontract and/or buy parts and services directly (without paying a mark-up or pass-through fee to Contractor). Expenses such as major engine overhauls costing over $50,000.00 may be procured by County in coordination and with the support of the Contractor.

The Contractor agrees to accept the specified compensation as set forth in this Contract as full payment for performing all services and furnishing all staffing, labor, insurance and bonds, vehicles, equipment, tools, materials, overhead, and travel required, for any reasonably unforeseen difficulties which may arise or be encountered in the execution of the services until acceptance, for risks connected with the services, and for performance by the Contractor of all its duties and obligations hereunder. The Contractor shall only be compensated as set forth herein for work performed in accordance with the Scope of Work. **The County shall have no obligation to pay any sum in excess of the fixed rates specified herein unless authorized by an amendment in accordance with Articles C. of the County Contract Terms and Conditions.**

2. Withholdings

County shall retain the right to withhold all payments should any provision of this Contract not be completed in a satisfactory manner or in accordance with this Contract. Only the amount associated with disputed performance shall be withheld pending resolution of the dispute. The remaining undisputed amount shall be paid promptly. If payment is withheld, County Project Manager shall notify Contractor in writing of the reasons and what action is required before payment will be made. Otherwise, County shall make payment within thirty (30) days after receipt and approval of the invoice.

3. Fees and Charges

The price must include all fees, shipping, freight, transportation, travel, taxes and any other fees. No other compensation shall be allowed.

County will pay the following fees in accordance with the provisions of this Contract. Fund authorization shall be as follows:

CONTRACT TERM	YEARLY COST	O&M Cost*	P404 Support*
January 1, 2025 - December 31, 2025	**$ 4,834,279.80**	**$2,936,548.59**	**$ 1,897,731.21**
January 1, 2026 - December 31, 2026	**$ 4,965,003.97**	**$2,401,845.58**	**$ 2,563,158.39**
January 1, 2027 - December 31, 2027	**$ 5,087,453.54**	**$2,478,851.71**	**$ 2,608,601.83**
Total of the Three-Years Not To Exceed Amount	**$ 14,886,737.31**	**$7,817,245.88**	**$ 7,069,491.43**

***Budget Breakdown is Estimated Above**

Cogeneration/Central Utility Plant Operation Services

The hourly rates shall be paid for the Contractor's staff members. Any replacement or addition of staff must be approved in writing by County prior to work being performed. All requirements and expenses related to the performance of work and services set forth in the Scope of Work will be paid on a time-and-materials basis.

Parts, materials, and subcontracted services provided by entities not affiliated with Contractor will be reimbursed by County at the actual cost plus 4.5% markup. Payment for materials may be made in advance.

Title	Time/Category	Rates		
		01/01/25-12/31/25	**01/01/26-12/31/26**	**01/01/27-12/31/27**
1. Project Manager	Regular Time	$263.93	$271.85	$280.00
2. Integration and Tech Engineering Managers	Regular Time	$263.93	$271.85	$280.00
3. O&M Technicians	Regular Time	$150.59	$155.11	$159.76
4. P404 Support Managers	Regular Time	$187.99	$193.63	$199.44
5. Procurement and Billing Administrator	Regular Time	$107.44	$110.66	$113.98
6. Site Maintenance Manager	Regular Time	$187.99	$193.63	$199.44
7. Site Operations Manager	Regular Time	$187.99	$193.63	$199.44
1. Project Manager	(1.5) Overtime Hourly Rate	Salaried Exempt	Salaried Exempt	Salaried Exempt
2. Integration and Tech Engineering Managers	(1.5) Overtime Hourly Rate	Salaried Exempt	Salaried Exempt	Salaried Exempt
3. O&M Technicians	(1.5) Overtime Hourly Rate	$187.93	$193.57	$199.37
4. P404 Support Managers	1.5 Overtime Hourly Rate	Salaried Exempt	Salaried Exempt	Salaried Exempt
5. Procurement and Billing Administrator	(1.5) Overtime Hourly Rate	$127.46	$131.28	$135.22

6. Site Maintenance Manager	(1.5) Overtime Hourly Rate	Salaried Exempt	Salaried Exempt	Salaried Exempt
7. Site Operations Manager	(1.5) Overtime Hourly Rate	Salaried Exempt	Salaried Exempt	Salaried Exempt
1. Project Manager	(2) Double Time Hourly Rate	Salaried Exempt	Salaried Exempt	Salaried Exempt
2. Integration and Tech Engineering Managers	(2) Double Time Hourly Rate	Salaried Exempt	Salaried Exempt	Salaried Exempt
3. O&M Technicians	(2) Double Time Hourly Rate	$225.28	$232.04	$239.00
4. P404 Support Managers	(2) Double Time Hourly Rate	Salaried Exempt	Salaried Exempt	Salaried Exempt
5. Procurement and Billing Administrator	(2) Double Time Hourly Rate	$147.46	$151.88	$156.44
6. Site Maintenance Manager	(2) Double Time Hourly Rate	Salaried Exempt	Salaried Exempt	Salaried Exempt
7. Site Operations Manager	(2) Double Time Hourly Rate	Salaried Exempt	Salaried Exempt	Salaried Exempt

Note:
Please note the classifications above pertain to the California Department of Industrial Relations Prevailing Wage Determination Classifications.

4. Final Payment

Final payment shall be issued based on the completion of the work as described in this Contract and County Project Manager accepts all work and JWA issued badges are returned to Badging Office.

5. Payment Terms – Payment in Arrears

Invoices are to be submitted in arrears to the user agency/department to the ship-to address, unless otherwise directed in this Contract. Contractor shall reference Contract number on invoice. Payment will be net 30 days after receipt of an invoice in a format acceptable to the County of Orange and verified and approved by the agency/department and subject to routine processing requirements. The responsibility for providing an acceptable invoice rests with the Contractor.

Billing shall cover services and/or goods not previously invoiced. The Contractor shall reimburse the County of Orange for any monies paid to the Contractor for goods or services not provided or when goods or services do not meet the Contract requirements.

Payments made by the County shall not preclude the right of the County from thereafter disputing any items or services involved or billed under this Contract and shall not be construed as acceptance of any part of the goods or services.

6. Taxpayer ID Number

The Contractor shall include its taxpayer ID number on all invoices submitted to the County for payment to ensure compliance with IRS requirements and to expedite payment processing.

7. Payment-Invoicing Instructions

The Contractor will provide an invoice on the Contractor's letterhead for goods delivered and/or services rendered. In the case of goods, the Contractor will leave an invoice with each delivery. Each invoice will have a number and will include the following information:

a**. Request for Payment**: Contractor shall use the JWA request for Payment procedure as defined by the Airport project management system. The Request for Payment form shall be divided according to the tasks set forth in the Attachment A, Section-I (Introduction) to the Contract Responsibility for providing an acceptable invoice to County for payment rests with Contractor. Incomplete or incorrect invoices are not acceptable and will be returned to Contractor for correction. A proper invoice shall include all appropriate documentation and information as may be required elsewhere in this Contract.

b. **Frequency**: Contractor shall request payment for work performed once per month with required supporting documentation and to the reasonable satisfaction of the County.

c. **Status Report**: A Scope of Work status report shall be submitted at the same time as submission of each Request for Payment. The status report shall include a written narrative of work performed during the invoicing period.

d. **Payment**: County shall be responsible for remitting payment within thirty (30) calendar days of the date of receipt of invoice in a format acceptable to County.

e. **Services**: Billing shall cover services and/or goods not previously invoiced. Subcontracted services shall be included with supporting documentation such as receipts and invoices from the various subcontractors.

f. **Hourly Rate**: Required elements to invoice for the hourly rate include the following: Timesheets of the staff showing hours worked and,

g. **Classification/Titles**: Contractor's employee's name and classification/title must agree to the titles stipulated in Attachment B and Attachment C of the Contract.

h. **Reimbursable**: Payment for reimbursable items is subject to supporting documentation requirements identified above in items a – g. County will not pay for reimbursable items without required supporting documentation submitted by Contractor. Parts purchased by Contractor will be reimbursed by County with original receipts and written authority for the purchase from County Project Manager attached.

i. **Disclaimer**: Payments made by County shall not preclude the right of County from thereafter disputing any items or services involved or billed under this Contract and shall not be construed as acceptance of any part of the goods or services.

Invoices and support documentation are to be forwarded to **(not both):**

Mailed to John Wayne Airport
Attention: Accounts Payable
3160 Airway Avenue
Costa Mesa, CA 92626

Or

Emailed to AccountsPayable@ocair.com