

Welcome to the

Awards Meeting

March 27, 2025, 10:00 AM EST

You have been joined to the meeting with your **audio muted** by default.

At the designated public comment time we will provide opportunity for you to unmute to speak.

During the meeting, public comments received via e-mail regarding any matter on the agenda for consideration will be read out. Per the Public Notice Agenda posted on JEA.com, public comments by e-mail must be received no later than 9:00 a.m. on the day of the meeting to be read during the public comment portion of the meeting.

Please contact **Camie Evers** by telephone at **(904) 832-3385** or by email at **everca@jea.com** if you experience any technical difficulties during the meeting.

JEA Awards Agenda March 27, 2025 225 North Pearl St., Jacksonville, FL 32202 - Board Room 1st Floor Teams Meeting Info												
Consent Agenda												
The Chief Procurement Officer offers the following items for the JEA Awards Consent Agenda. Any item may be moved from the Consent Agenda to the Regular Agenda by a committee member asking that the item be considered separately. All items on the Consent agenda have been approved by OGC, Budget and the Business Unit Vice President and Chief. The posting of this agenda serves as an official notice of JEA's intended decision for all recommended actions for Formal Purchases as defined by Section 3-101 of the JEA Procurement Code . Please refer to JEA's Procurement Code, if you wish to protest any of these items.												
Award #	Type of Award	Solicitation # & Short Description/Title	VP	Awardee	Funding Source	Business Unit Estimate	Award Amount	Original Award Amount	New Not-to-Exceed	Amendments	Term (Projected) Start Date - End Date	JSEB Participation (Y/N) If Y, then list company name(s) (% , \$ - awarded)
1	Minutes	Minutes from 03/20/2025 Meeting	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2	Request for Proposals (RFP)	1411873446 Design Services for the Wildlight WTP	Zammataro	CDM Smith Inc.	Capital	\$2,309,000.00	\$2,109,940.00	N/A	\$2,109,940.00	N/A	Project Completion Start Date: 04/28/2025 End Date: 05/15/2026	Yes Meskel & Associates Engineering, PLLC - GeoTech (\$45,990.00, 2.61%) Peters and Yaffee, Inc - FDOT ROW & MOT (\$35,236.00, 2.00%) Blue Leaf Landscape - Landscaping (\$14,070.00, 0.80 %)
	Advertised: 10/25/2025 Opened: 01/07/2025 Three (3) Responses Received Public Evaluation Meeting: 02/04/2025 CDM Smith - 1 Mott MacDonald - 2 Carollo - 3 For additional information contact: Marline McDonald The scope of services for this project encompasses preliminary design, final detailed design, construction cost estimation, permitting assistance, engineering support during the bidding process, engineering services throughout construction, and engineering services during the startup phase of the new 2.5 MGD Wildlight Water Treatment Plant (WTP) and corresponding wellfield. This new WTP will be located in Nassau County and will provide potable water to JEA's North Grid. The hourly rates specified in this contract are consistent with those applied in previous agreements. The fee has been compared to rates from past projects and deemed reasonable.											
3	Invitation for Bid (IFB)	1411877848 (IFB) Electrical General Contractor Services	Erixton	Premier Communications Group, Inc. Cogburn Bros, Inc	Capital, O&M	\$1,200,000.00	\$635,944.19 \$635,944.19	N/A	\$635,944.19 \$635,944.19	N/A	One (1) Year w/ Two (2) 1-Yr. Renewals Start: 04/01/2025 End: 03/31/2026	N
	Advertised: 11/22/2024 Opened: 01/07/2025 Four (4) Bids Received Premier Communications Group, Inc. - \$6,271,660.00 Cogburn Bros, Inc - \$6,447,223.75 Alliance Industrial Group - Disqualified Ferreira Construction - Disqualified For additional information contact: Jason Behr The intent of this solicitation is to obtain an independent contractor to provide specific electrician trades needs to perform electrical contractor services and to supplement JEA's work force. The scope of work shall include, but not necessarily be limited to, furnishing of all supervision, labor, and tools required to perform electrical work at JEA's power generating facilities which include but not limited to Northside Generating Station, Brandy Branch Generating Station, Greenland Energy Center, Kennedy Generating Station. Premier Communications Group, Inc and Cogburn Bros, Inc were the two lowest bidders who meet the minimum qualifications and are being awarded on an even split. After multiple attempts, the disqualified vendors were unable to provide references of similar projects to meet the minimum qualifications. Premier Communications Group had lower labor rates while Cogburn Bros had lower equipment rates so the split award is deemed reasonable. JEA has decided to make this a one (1) year contract instead of a five (5) year contract. The plan moving forward is to re-bid these services as an evaluated RFP. The business unit plans to revise the technical specifications to distinguish these services as industrial plant electrical construction services as opposed to general electric construction services. The budget estimate for one (1) year was \$1,200,000 so the award amount of \$1,271,888.38 is deemed reasonable.											
4	Invitation for Bid (IFB)	1411921050 (IFB) BGS Standby Emergency Diesel Generator Integration	Erixton	Miller Electric Company	Capital	\$757,146.00	\$987,184.32	N/A	\$987,184.32	N/A	Project Completion Start Date: 05/01/2025 End: 04/30/2026	N
	Advertised: 01/21/2025 Opened: 02/25/2025 Three (3) Bids Received Miller Electric Company - \$987,184.32 Cogburn Bros, Inc - \$1,499,700.00 Zabatt Power Systems - \$1,997,949.20 For additional information contact: Jason Behr Brandy Branch Generating Station (BGS) is a critical facility that provides dispatch for JEA's infrastructure. BGS has had several power blackouts since its commissioning, leaving critical unit equipment unprotected until power was restored. This prompted JEA to install a 480V standby diesel generator to provide power to specific equipment in the case of a future blackout; however, the generator requires integration into a backup power system. Integrating the generator to all the units and their critical equipment will ensure plant resilience and safety during power outages. JEA is seeking a vendor to provide material/labor to install/integrate automatic transfer switch (ATS) and switchboard equipment per engineering specifications and drawings. The budget estimate for this project was \$757,038.32. The winning bid was approximately 230k higher than the estimate. This can be attributed to additional scope added which includes a concrete pad and a roll up door installation as well as the original estimate being an outdated quote.											
5	Contract Increase	1411544847 IFB Remote Operated Switchgear for Inventory Stock	Phillips	G & W Electric Company	Inventory	\$531,000.00	\$531,000.00	\$1,330,667.00	\$1,861,667.00	N/A	Three (3) Years w/ Two (2) 1-Yr. Renewals Start Date: 02/23/2024 End Date: 02/22/2027	N
	Originally awarded: 02/08/24 For additional information contact: Lynn Rix This contract is for pole mounted three-phase remote operated switchgear for inventory stock. Planning forecasts an additional 45 units of SWERC002 will need to be purchased over the remainder of this contract. This request is to add \$531,000.00 to carry this contract to end of term.											

6	<div>Piggyback-Sourcewell Cooperative Contract 12193-SHI</div>	<div>Dragos Enhanced Grid Cybersecurity Threat and Vulnerability Management</div>	<div>Datz</div>	<div>SHI International Corp</div>	<div>Capital</div>	<div>\$450,000.00</div>	<div>\$342,848.35</div>	<div>N/A</div>	<div>\$342,848.35</div>	<div>N/A</div>	<div>One (1) Year w/ Two (2) 1-Yr. Renewals Start: 04/01/2025 End: 03/31/2026</div>	<div>N</div>
<div>For Additional Information Contact: Angel Love</div> <div>JEA's information security program enhances its cybersecurity through risk assessments, vulnerability management, and incident response. This Dragos Enhanced Grid Cybersecurity Threat and Vulnerability Management project and one (1) license subscription focuses on improving threat management for Operational Technology (OT) and Information Technology (IT) systems, integrating a database and ticketing system for better visibility and automation. The products are intended to preserve the confidentiality, integrity, and availability of life-sustaining utilities to the region through expanded Network Detection and Response (NDR) systems that provide greater threat visibility. They will bring greater threat visibility to the JEA W/WW division specifically. The NDR solution is incorporated where appropriate to enhance security features at facilities that service the greatest number of customers. The NDR management and network sensors will be configured to send alerts notifying the users that there is a detected vulnerability or a change in the baseline.</div> <div>Network Detection and Response (NDR) technology, key to this effort, will be deployed at high-risk OT locations to enhance threat detection and response. This \$342,848.35 request to SHI International Corp, via the Sourcewell contract, will secure the NDR technology essential to strengthening JEA's cybersecurity posture.</div> <div>This award is part of the Department of Energy (DOE) project for "Enhanced Grid Cybersecurity Threat and Vulnerability Management" in which DOE will cost share half of the project cost with JEA and has a total planned budget of \$800,000. This award cost of \$342,848.35 is all part of JEA's \$400,000 planned share of the budget. A smaller purchase for a Tenable Security center scanning product upgrade for \$36,528.68 will be made separately</div> <div>Contract Name: Sourcewell- Technology Products & Solutions Contract #: 121923-SHI Expiration Date: 02/27/2028</div>												
7	<div>Request for Proposal (RFP)</div>	<div>1411829647 (RFP) 15kV Substation Switchgear Projects</div>	<div>Erixton</div>	<div>Powell Electrical Systems Inc Switchgear Power Systems, LLC</div>	<div>Capital</div>	<div>\$11,881,045.00</div>	<div>\$10,461,490.00 \$1,542,725.00</div>	<div>N/A</div>	<div>\$10,461,490.00 \$1,542,725.00</div>	<div>N/A</div>	<div>Project Completion Start Date: 04/04/2025 End Date: 12/31/2026</div>	<div>N</div>
<div>Advertised: 10/17/2024 Opened: 12/10/2024 Two (2) Responses Received Public Evaluation Meeting: 02/13/2025 Powell Electrical Systems Inc. - \$12,292,522.00 Switchgear Power Systems, LLC - \$11,487,970.00 For additional information contact: Jason Behr</div> <div>JEA is replacing the metal clad switchgear lineup and switchgear building at various substations located at Georgia Street, College Street, and Kennedy Street.</div> <div>Georgia Street scope of work is the construction of fifteen (15) new metal enclosed breakers. The new breaker lineup will be initially fed from the T1 & T2 transformers with the ability to add a T3 in the future. There will be three new switchgear buildings; each switchgear will consist of bus tie breakers, five (5) feeder breakers and one (1) source breaker (the west switchgear will not have a separate source breaker). This design will allow all of the circuits to be fed by the T1 or T2; or half fed by the T1 and half fed by the T2. Each new switchgear bus and all non-feeder breakers shall be rated for 3,000 amps minimum. Bus tie conductors will be rated for 2,450 amps minimum. Feeder breakers must be rated for 1200 amps minimum. New feeders will be numbered 80 through 94. Existing T2 feeders shall be relabeled 95-99. Breaker 13T2T1 shall be relabeled 13T2T3.</div> <div>College Street scope of work is the replacement of two existing switchgears, and addition of one new switchgear in two existing buildings. The switchgear manufacturer will also supply and install all new non-segregated, 3000 Amp rated Bus Duct. Manufacturer will also replace existing non-segregated 2000A bus duct with 3000A rated duct.</div> <div>Kennedy scope of work is to Install a new 13.2kV T11 switchgear building consisting of one (1) bus tie breaker, eight (8) feeder breakers and one (1) source breaker. The new switchgear bus and all non-feeder breakers shall be rated for 3000 amps minimum. Bus tie conductors will be rated for 2450 amps minimum. Feeder breakers must be rated for 1200 amps minimum.</div> <div>Proposals received were evaluated based on price, past performance, company experience, and design approach and workplan. Powell Electrical Systems Inc. was the highest evaluated vendor and being awarded the two larger projects in Georgia Street and College Street. Switchgear Power Systems, LLC was the second highest evaluated and is being awarded Kennedy Street. JEA made the decision to split the award to not only reduce the risk of having one supplier, but also build relationships with both vendors where the competition is limited for this type of work. The decision to split also yields a savings of \$288,757.</div>												
8	<div>Request for Proposal (RFP) CCNA</div>	<div>1411799247 (RFP) CCNA General Engineering Services For Electric Distribution</div>	<div>Erixton</div>	<div>Pickett & Associates, Inc Chen Moore and Associates Inc</div>	<div>Capital</div>	<div>\$750,000.00</div>	<div>\$450,000.00 \$300,000.00</div>	<div>N/A</div>	<div>\$450,000.00 \$300,000.00</div>	<div>N/A</div>	<div>Three (3) Years w/ Two (2) - 1 Yr. Renewals Start: 04/01/2025 End: 03/31/2028</div>	<div>Y Pickett: Meskel and Associates Engineering, PLLC - 5% Darden Surveying and Mapping - 5% Chen Moore: Meskel and Associates Engineering PLLC- 5% VIA Consulting Services, Inc - 5%</div>
<div>Advertised: 07/24/2024 Opened: 08/27/2024 Nine (9) Responses Received Public Evaluation Meeting: 01/29/2025 Pickett & Associates - 1 Chen Moore & Associates - 2 Power Engineers - 3 GAI Consultants - 4 Enercon - 5 Leidos Engineering - 6 KCI Technologies - 7 EC Fennell - 8 TRC Engineers - 9 For additional information contact: Jason Behr</div> <div>JEA is seeking an engineering firm to provide professional consulting and engineering services in support of JEA's electric distribution projects including, but not limited to, cost and scheduling, construction support, planning and customer support activities. Engineer is expected to offer creative and cost-effective ideas and solutions which may involve new technology and a choice of approaches to problems. Engineer's work may include all aspects of engineering design from the generating station to customer devices.</div> <div>Proposals were evaluated based on staff experience, company experience, and JSEB participation. Pickett & Associates was the highest evaluated vendor with Chen Moore & Associates being a close second. The solicitation stated JEA intended to award two contracts for these services and is being awarded to the top two evaluated vendors. Rates received were comparable to current similar contracts that both vendors have with JEA and are deemed reasonable. The award amount split is based on a 60% / 40% distribution of the total award; however, as future projects arise, this percentage split will change as projects are assigned to the respective supplier.</div>												
9	<div>Invitation for Bid (IFB)</div>	<div>1411900647 IFB District II (Cedar Bay) WRF New Plant Entrance Construction</div>	<div>Phillips</div>	<div>Petticoat-Schmitt Civil Contractors, Inc.</div>	<div>Capital</div>	<div>\$365,000.00</div>	<div>\$346,613.00</div>	<div>N/A</div>	<div>\$346,613.00</div>	<div>N/A</div>	<div>Project Completion Start Date: 03/31/2025 End Date: 07/07/2025</div>	<div>N</div>
<div>Advertised: 12/12/2024; Optional Pre-Response: 12/19/2024; Optional Site Visit: 12/20/2024; Additional Optional Site Visit: 01/13/2025; Opened: 02/19/2025 Three (3) Responses Received: Petticoat-Schmitt Civil Contractors, Inc. \$458,000.00 (\$346,613.00 final pricing with six (6) workbook lines removed) Auld & White Constructors, LLC \$459,100.00 (\$392,000.00 final pricing with six (6) workbook lines removed) KBT Contracting Corp \$605,150.00 (\$517,459.00 final pricing with six (6) workbook lines removed) For additional information contact: Halley Stewart</div> <div>The purpose of this Invitation for Bid (IFB) is to select a supplier to provide construction services for a new entrance driveway for District II (Cedar Bay) Water Reclamation Facility (WRF). This new entrance will provide access to Cedar Bay WRF through Imerson Industrial Complex. The primary access to the District II (Cedar Bay) WRF is via Cedar Bay Road, which is primarily a residential street. In response to recent customer complaints and public feedback at the JEA Board meeting, a new entrance has been designed through the nearby Imerson Industrial Complex. This new route will provide exclusive access for JEA vehicles and will not be open to the public. The new entrance will help alleviate the current JEA traffic that passes through the residential neighborhood.</div> <div>Three responses were received, however the initial response prices were higher than the business unit budget estimate of \$365,000.00. In order to align closer to the budget, the Monument Sign work item was removed from the current project. Following discussions with JEA Security, we successfully removed five additional work item lines from the workbook, as these will be procured through JEA Security. Procurement negotiated with the lowest bidder, Petticoat-Schmitt Civil Contractors, Inc. and was able to reduce an additional work item by \$7,000.00. The original and final pricing for each bidder, after the removal of the six workbook lines, is presented above in the agenda header.</div> <div>The lowest finalized bid from Petticoat-Schmitt Civil Contractors, Inc. in the amount of \$346,613.00 is 5% lower than the business unit budget estimate, is 11.6% lower than the next lowest finalized bid of \$392,000.00, and has been deemed reasonable.</div>												

10	Invitation for Bid (IFB)	1411934848 TRAPF006 - One-Time Purchase for JEA Inventory	Phillips	Van Tran Transformers	Inventory	\$500,000.00	\$360,600.00	\$360,600.00	\$360,600.00	N/A	Project Completion Start Date: 04/03/2025 End Date: 11/21/2025	N
	<div>Advertised: 02/10/2025 Opened: 03/11/2025 Two (2) Bids Received Van Tran Transformers - \$360,600.00 (quoting Van Tran) - Lead Time 32 -34 weeks Wesco Distribution, Inc. - \$529,797.44 (quoting ABB) - Lead Time 68 weeks For additional information contact: Lynn Rix</div> <div>The purpose of this solicitation is to evaluate and select a vendor to provide the item described in this Solicitation at the best value to JEA. JEA Item Number TRAPF006 QUANTITY: 2 TRANSFORMER, 3750KVA, 13200Y/7620 VOLT PRIMARY, 4160Y/2400 VOLT SECONDARY, 3-PHASE, PADMOUNTED, STEPDOWN, (DELIVERY TO BE SCHEDULED 72 HOURS IN ADVANCE OF ARRIVAL, WITH 2325 EMERSON ST. JAX. FL 32207). The following manufacturers are approved: ABB, Eaton, and VanTran</div> <div>This is not a commonly used transformer and hasn't been purchased by JEA in the past, however, two are needed for the Hogan Chiller Plant. The lowest responsible bidder is 32% or \$139,400.00 lower than the business estimate and 38% lower than the next bidder. This is deemed reasonable.</div>											

Consent Agenda Action

Committee Members in Attendance	Names	
Motion by:		
Second By:		
Committee Decision		

Consent and Regular Agenda Signatures

Budget	Name/Title	_____
Awards Chairman	Name/Title	_____
Procurement	Name/Title	_____
Legal	Name/Title	_____

JEA Awards Agenda March 20, 2025 225 North Pearl St., Jacksonville, FL 32202 - Board Room 1st Floor Teams Meeting Info												
Consent Agenda												
The Chief Procurement Officer offers the following items for the JEA Awards Consent Agenda. Any item may be moved from the Consent Agenda to the Regular Agenda by a committee member asking that the item be considered separately. All items on the Consent agenda have been approved by OGC, Budget and the Business Unit Vice President and Chief. The posting of this agenda serves as an official notice of JEA's intended decision for all recommended actions for Formal Purchases as defined by Section 3-101 of the JEA Procurement Code . Please refer to JEA's Procurement Code, if you wish to protest any of these items.												
Award #	Type of Award	Solicitation # & Short Description/Title	VP	Awardee	Funding Source	Business Unit Estimate	Award Amount	Original Award Amount	New Not-to-Exceed	Amendments	Term (Projected) Start Date - End Date	JSEB Participation (Y/N) If Y, then list company name(s) (%; \$ - awarded)
1	Minutes	Minutes from 03/13/2025 Meeting	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2	Contract Increase	1411499846 Phase 2 - Engineering Services for the North West Water Reclamation Facility Project	Zammataro	Hazen & Sawyer	Capital	\$11,400,000.00	\$11,327,202.00	\$2,422,199.00	\$13,749,401.00	N/A	Project Completion Start Date: 12/04/2024 End Date: 12/31/2029	Y Four Waters Engineering, Inc - Civil (\$1,461,815.00, 12.9%) Smith Surveying, LLC - Survey/SUE (\$192,120.00, 1.7%) Alpha Envirotech Consulting, Inc - Environmental (\$108,854.00, 0.96%)
	Last awarded: 08/22/2024 For additional information contact: Marline McDonald This contract increase covers Phase 2 of Engineering Design for the Northwest Water Reclamation Facility (WRF) Project. The scope of services includes the design, permitting and construction administration of an advanced water reclamation facility (WRF) with an initial capacity of approximately 2 MGD. The facility will feature biosolids processing, new influent pipelines, and a deep disposal well, located within JEA's northwest service area. Additionally, the project encompasses the development of a master development plan for the future expansion of the plant site, which will ultimately support a capacity of at least 9 MGD, with total buildout capacity to be determined. Phase 1 of the project received initial approval in August 2024. However, due to an accelerated timeline, the scope of work is being updated to align with this accelerated schedule. The Phase 1 award included preliminary recommendations for short and long-term planning studies and basis of technical memoranda documents. The project will follow a Construction Management at Risk (CMAR) delivery method, which will also influence the engineering scope in subsequent phases. The revised portions of Phase 2 are outlined below. Phase 3 costs for engineering services during construction will be brought for approval once the Phase 2 engineering is completed. This contract increase consists of the following: 1. WRF Studies, Design, Permitting, Early Work Packages, and Guaranteed Maximum Price (GMP) Development Phase 1 services included the preliminary basis of Technical Memoranda for the WRF (e.g., recommendations on design flows and loads, BioWin modeling, reject storage strategy, onsite influent pump station, biosolids, and overall site planning and layout) in the amount of \$2,422,299.00, and was Awarded on August 2024. Phase 2 includes detailed design (e.g., drawings, specifications, calculations, site survey, tree survey, ERP permit application, interface with CMAR contractor, opinion of probable cost estimates); an increase of \$10,594,062.00 2. Effluent Management Study Fee: \$518,330.00 3. Exploratory Well Design, Permitting, and Bidding Fee: \$214,810.00 Total for Phase 2: \$11,327,202.00 The hourly rates are consistent with the original contract, and the total costs were reviewed by JEA project staff and deemed reasonable compared to past JEA projects.											
3	Request for Proposal (RFP) CCNA	1411799247 (RFP) CCNA General Engineering Services For Electric Distribution	Erixton	Pickett & Associates, Inc Chen Moore and Associates Inc	Capital	\$750,000.00	\$450,000.00 \$300,000.00	N/A	\$450,000.00 \$300,000.00	N/A	Three (3) Years w/ Two (2) - 1 Yr. Renewals Start: 04/01/2025 End: 03/31/2028	Y Pickett: Meskel and Associates Engineering, PLLC - 5% Durden Surveying and Mapping - 5% Chen Moore: Meskel and Associates Engineering PLLC- 5% VIA Consulting Services, Inc - 5%
	Item 3 is deferred											
4	Contract Increase and Extension	138-19 ITN Concrete Manholes for JEA Inventory Stock	Phillips	Lindsay Precast, LLC	Inventory	\$398,129.79	\$398,129.79	\$4,309,144.40	\$5,138,188.63	05/28/2024 - \$430,914.44	Five (5) Years w/ No Renewals Start Date: 04/28/2020 End Date: 06/11/2025	N
	Originally Awarded: 02/13/2020 For additional information contact: Lynn Rix The contract for Concrete Manholes is being re-bid as an ITN with first round responses due on 4/1/25. Based on historical spend, the contract had enough money available for the remainder of the term, however, two upcoming large projects – The Ranger Station Roadway and the POW-MIA Underground Connector will exhaust those funds. These projects are new, unplanned projects that were originally not included in the bid's forecast. The Award amount is based on a new forecast that includes these projects and the additional timeframe. At this time we would like to extend the current contract from 4/27/25 to 6/11/25 to allow time for negotiations and new contracts to be put in place along with a contract increase of \$398,129.79 to cover this period.											
5	Request for Proposal (RFP)	1411829647 (RFP) 15kV Substation Switchgear Projects	Erixton	Powell Electrical Systems Inc Switchgear Power Systems, LLC	Capital	\$11,881,045.00	\$10,461,490.00 \$1,542,725.00	N/A	\$10,461,490.00 \$1,542,725.00	N/A	Project Completion Start Date: 04/04/2025 End Date: 12/31/2026	N
	Item 5 is deferred											
6	Developer Participation	2022-4048 Villages of Westport Offsite Force Main	Zammataro	Lennar Homes, LLC	Capital	\$1,845,752.18	\$1,845,752.18	N/A	\$1,845,752.18	N/A	Project Completion Start Date: 01/15/2025 End Date: 06/30/2026	N
	Opened: 03/11/2024 Three (3) bids received (by Developer) For additional information contact: David King This is a private development project where JEA has identified improvements consistent with the JEA Cost Participation Policy and as such are eligible for reimbursement. The Villages of Westport Offsite Force Main project (Avail. No. 2022-4048) is to serve Villages of Westport Development which will total 1000 single family residential units. This project is located within the District 2/Cedar Bay Sewer Basin. The Villages of Westport Offsite Force Main project is generally located in northwest Duval County. This area of Duval County has experienced significant development interest in the last several years. Based on the projected build out of Villages of Westport, a total of 1000 residential units, the maximum length of transmission main for JEA participation is 12,192 feet. The proposed length of 12-inch force main infrastructure required to meet the needs of the development of 12,660 feet, results in a percentage of force main eligible for reimbursement for transmission of 96.3%. Additionally, JEA Planning determined that the 12-inch force main infrastructure that was determined to be the required size to meet the needs of the development, needed to be upsized to a 20-inch force main. The amount of cost participation is the difference between the bid for the base infrastructure (12") and the bid for the upsized infrastructure (20") in addition to 31% of the 12-inch transmission line, reduced by the 0.963 to account for the eligible reimbursement amount for transmission. The developer has followed JEA procurement directives by advertising and awarding to the highest evaluated bidder. The solicitation was advertised, and a pre-bid meeting was held on 2/15/2024. Three bidders attended the prebid meeting. Jax Dirtworks, Inc. was the highest evaluated bidder and was awarded the project. The bid is approximately 45% below the JEA estimate. The JEA estimate included the material, labor, and equipment. JEA is reimbursing in accordance with the Cost Participation Policy for transmission sized mains, upsizing of infrastructure, and the bid amount is deemed reasonable.											
7	Invitation for Bid (IFB)	1411934848 TRAPP006 - One-Time Purchase for JEA Inventory	Phillips	Van Tran Transformers	Inventory	\$500,000.00	\$360,600.00	\$360,600.00	\$360,600.00	N/A	Project Completion Start Date: 04/03/2025 End Date: 11/21/2025	N
	Item 7 is deferred											

8	Contract Increase/Ratification	1410275453 (RFP) Industrial and Lab Gas Supply	Erixton	Nexair LLC Airgas USA LLC	O&M	\$390,000.00	Nexair LLC - No Change Airgas USA LLC - \$592,218.61	Nexair LLC - \$2,240,000.00 Airgas USA LLC - \$280,000.00	Nexair LLC - \$2,240,000.00 Airgas USA LLC - \$1,178,518.61	Airgas USA LLC 10/14/2021 - \$253,000.00 05/30/2024 - \$53,300	Five (5) Years w/ Two (2) - 1Yr. Renewals Start: 05/30/2021 End: 05/29/2026	N		
	Originally awarded: 05/13/2021 For additional information contact: Jason Behr													
	The purpose of this solicitation is to supply industrial and laboratory gases and related services (pick up and drop off, cylinder rental, cylinder refurbishment) for multiple JEA generating stations, laboratories and water treatment plants, all located within the JEA's operating territory in Jacksonville, Florida.													
	This was originally awarded to three vendors. After evaluations, Nexair was awarded the Bulk H, O2, and N which is the majority of the contract. Matheson Tri-Gas Inc was awarded Bulk CO2 and Airgas USA LLC was awarded bottle service. During contracting phase, Matheson was not agreeable to terms so their portion of the contract was awarded to Airgas in Amendment 1.													
	While there have been allowable price adjustment increases, this contract is being increased mainly due to the increased demand for this service from Airgas. This increase accounts for \$390,000 of requested increase and is the projected amount to make it to contract term.													
This contract is split between two internal tracking mechanisms in Oracle. One is a Blanket Purchase Agreement, and the other is a Contract Purchase Agreement. The Blanket Purchase Agreement is no longer used by the business unit. JEA executed a 10% administrative increase to this contract for \$53,500 back in May 2024. The Contract Purchase Agreement was inadvertently updated to the full not-to-exceed contract amount not taking into account the spent balance on the Blanket Purchase Agreement. This has resulted in a ratification amount of \$202,218.61 and is the remaing amount of the Contract Increase. This was discovered when bringing this new increase to the Awards Committee.														
9	Invitation for Bid (IFB)	1411900647 IFB District II (Cedar Bay) WRF New Plant Entrance Construction	Phillips	Petticoat-Schmitt Civil Contractors, Inc.	Capital	\$365,000.00	\$346,613.00	N/A	\$346,613.00	N/A	Project Completion Start Date: 03/24/2025 End Date: 07/07/2025	N		
	Item 9 is deferred													
10	Request for Proposal (RFP)	1411509246 Water and Wastewater Utility System Condition Assessments	Crawford	Carollo Engineers, Inc.	O&M	\$350,000.00	\$350,000.00	N/A	\$350,000.00	N/A	Three (3) years w/Two (2) - 1 Yr. Renewals Start Date: 04/01/2025 End Date: 03/31/2028	N		
	Advertised: 11/15/2023 Opened: 01/09/2024 Three (3) Responses Received Public Evaluation Meeting: 04/04/2024 Carollo Engineers, Inc. - 1 Kimley-Horn and Associates - 2 Arcadis U.S. Inc. - 3 For additional information contact: Dan Kruck													
	JEA is seeking qualified firms to provide engineering and consulting services for inspecting and assessing water, wastewater, and reuse utility infrastructure. These services will support condition assessments and related analyses for projects exceeding JEA's internal capacity. Contracts will be awarded on a per-project basis, adhering to Florida's CCNA guidelines. Specific tasks are listed below (but not limited to):													
	1. Onsite System Inspections: Evaluating above-ground facilities, including treatment plants, water wells, storage tanks, hydrants, lift stations, and related assets. 2. CCTV Inspections: Conducting Closed Circuit TV (CCTV) inspections of gravity wastewater collection lines and laterals, based on historical records, asset management data, and staff input. 3. Water Sampling and Testing: Performing tests at various system points, particularly for below-ground assets. 4. Control Systems Assessment: Inspecting control instrumentation, water/wastewater telecom infrastructure (e.g., wireless, fiber, SCADA, AML and HMI systems), and other related systems. 5. Data Analysis and Technical Evaluations: Reviewing and compiling data, conducting surveys and geotechnical investigations, and creating or reviewing as-built drawings. 6. Detailed Reporting: Preparing utility system inspection reports that include life expectancy estimates, critical needs, and technical findings. 7. Workshops and Coordination/Stakeholder Engagement: Participating in workshops and conference calls to discuss draft reports, gather feedback, and finalize deliverables. Developing presentations and attending meetings with various stakeholders, including senior leadership and public groups.													
	After the public evaluation meeting on 04/04/2024 this contract negotiation was placed on hold until JEA leadership developed a plan before proceeding with contract award. The task orders for this contract will be based off of the negotiated hourly rates, and those rates may be increased via CPI annually. The proposed hourly rates were reviewed by JEA staff and deemed reasonable compared to current market conditions.													
11	Request for Proposal (RFP)	1411509646 Electric Utility System Condition Assessments	Crawford	EN Engineering, LLC	O&M	\$350,000.00	\$350,000.00	N/A	\$350,000.00	N/A	Three (3) years w/Two (2) - 1 Yr. Renewals Start Date: 04/01/2025 End Date: 03/31/2028	N		
	Item 11 moved to Regular Agenda as Item 2													
Consent Agenda Action														
Committee Members in Attendance	Names	Ted Phillips, Jodi Brooks, Kim Wheeler												
Motion by:	Jodi Brooks													
Second By:	Kim Wheeler													
Committee Decision	Items 1-2, 4, 6, 8, and 10 are Approved. Items 3,5,7, and 9 are deferred. Item 11 is moved to regular Agenda													

Regular Agenda																				
Award #	Type of Award	Solicitation # & Short Description/Title	VP	Awardee	Award Amount	Business Unit Estimate	Original Award Amount	New Not-to-Exceed	Amendments	Term	JSEB Participation (Y/N) If Y, then list company name(s) (% , \$ - awarded)	Action								
1	Contract Increase	1410616846 Transmission Engineering Services	Erixton	Pickett & Associates, Inc	Chen Moore & Associates, Inc.- No Change	\$200,000.00	Chen Moore & Associates, Inc.- \$88,000.00	Chen Moore & Associates, Inc.- \$1,064,594.00	01/15/2023 Chen Moore & Associates, Inc.- \$12,000.00 Leidos Engineering, LLC- \$12,000.00 Pickett & Associates, Inc.- \$12,000.00 05/25/2023 Chen Moore & Associates, Inc.- \$141,850.00 Leidos Engineering, LLC- \$300,000.00 03/12/2024 Chen Moore & Associates, Inc.- \$73,966.30 02/13/2025 Chen Moore & Associates, Inc.- \$250,964.70 Leidos Engineering, LLC- \$515,163.60	Three (3) Years w/ Two (2) - 1 Yr. Renewals Start Date: 10/01/2022 End Date: 09/30/2025	JSEB Optional CMA - 7% Meskel & Assoc. - 5% VIA - 2% Leidos - 5% CSI Geo - 1% Alpha Envirotech - 1% Smith Surveying - 3% Pickett & Assoc. - 5% Meskel & Assoc. - 5%	Motion by: Jodi Brooks Second by: Kim Wheeler Committee Decision: Approved								
					Leidos Engineering, LLC- No Change		Leidos Engineering, LLC- \$88,000.00	Leidos Engineering, LLC- \$915,163.60												
					Pickett & Associates, Inc.- \$200,000.00		Pickett & Associates, Inc.- \$88,000.00	Pickett & Associates, Inc.- \$300,000.00												
					Originally Awarded: 08/25/2022 For additional information contact: Jason Behr Contract engineers are needed to supplement the design process when JEA in-house engineering resources may not meet the urgent demands of in-service dates. Electric transmission engineering is a very specialized area; therefore, JEA requires companies who have the resources and experience to execute electric transmission engineering. These contracts were originally awarded for established projects and budgets known at the time. The original award noted that we would return to the Awards Committee for increases as new projects were identified throughout the life of the contract. This increase is for a new project that has been established for FY25/FY26. There have been no rate increases outside of the standard CPI allowable per the contract. The vendors selected are based on expertise for the respective project, availability of resources, and distributing of projects. It should be noted that Pickett is the only vendor receiving an increase at this time as Leidos and Chen Moore have recently received increases for their identified projects.															
					DISCUSSION/ACTION: Please explain why we keep adding money to these contracts on a monthly basis, and can we work to avoid these frequent adjustments? We didn't bring up Pickett's contract earlier because it was a separate project that got paused due to financial reasons and won't resume until FY 27. However we are still working with the consultant to secure land for the new transmission circuits. Since we already have a general contract with Pickett, it makes sense to use them for creating the necessary exhibits to secure land rights. The reason we didn't address this earlier is that we didn't have a request or proposal from them at the time. DISCUSSION/ACTION PARTICIPANTS: Ted Phillips, Sebastian Chmst															
2	Request for Proposal (RFP)	1411509646 Electric Utility System Condition Assessments	Crawford	EN Engineering, LLC	\$350,000.00	\$350,000.00	N/A	\$350,000.00	N/A	Three (3) years w/Two (2) - 1 Yr. Renewals Start Date: 04/01/2025 End Date: 03/31/2028	N	Motion by: Jodi Brooks Second by: Kim Wheeler Committee Decision: Approved								
													Advertised: 11/15/2023 Opened: 01/09/2024 One (1) Responses Received Public Evaluation Meeting: 04/03/2024 EN Engineering, LLC - 1 For additional information contact: Dan Kruck The scope of work includes providing engineering and consulting services for inspecting and assessing electric utility infrastructure. These services will support condition assessments and related analyses for projects beyond JEA's internal capacity. Contracts will be awarded on a per-project basis to the most qualified firms, adhering to Florida's CCNA guidelines. Specific tasks are listed below (but not limited to): 1. Condition Assessment: Evaluating electrical system components such as poles, transformers, wires, switches, cables, substation equipment, and other assets to determine their current state. 2. Control Systems Inspection: Inspecting and assessing control instrumentation, utility telecom infrastructure (e.g., wireless and fiber communication systems), and systems like SCADA, AML, and metering. 3. Data and Technical Analysis: Collecting and analyzing data through surveys, geotechnical investigations, and technical evaluations, which may involve reviewing and creating as-built drawings. 4. Detailed Reporting: Preparing comprehensive inspection and condition assessment reports, including critical needs, life expectancy estimates, and technical findings. 5. Workshops and Coordination: Facilitating workshops and conference calls to review draft reports, gather input, and finalize documents based on feedback. 6. Presentations and Meetings: Developing presentations and attending meetings with staff, leadership, and other stakeholders to communicate findings and recommendations. After the public evaluation meeting on 04/03/2024 this contract negotiation was placed on hold until JEA leadership developed a plan before proceeding with contract award. The task orders for this contract will be based off of the negotiated hourly rates, and those rates may be increased via CPI annually. The proposed hourly rates were reviewed by JEA staff and deemed reasonable compared to current market conditions.							
													DISCUSSION/ACTION: There was only one response received on this solicitation. Can someone provide context as to why we didn't receive more? We extended the solicitation out several weeks and contacted multiple suppliers to try and receive more responses. JEA asked if updating any of the solicitation requirements/specs would make them more likely to bid, but that did not result in any additional interested firms. DISCUSSION/ACTION PARTICIPANTS: Jodi Brooks and Dan Kruck							
Consent and Regular Agenda Signatures																				
Budget	Name/Title	Laure A Whitmer 3/20/25																		
Awards Chairman	Name/Title	Theodore B Phillips 3/20/2025																		
Procurement	Name/Title	on behalf of Jenny McCollum																		
Legal	Name/Title	Rebecca Lavis																		

Exhibit ____

JEA SOLICITATION 1411873446**ENGINEERING SERVICES****FOR****WILDLIGHT WATER TREATMENT PLANT AND WELLFIELD****March 7, 2025**

This Exhibit, when executed, shall be incorporated in and become part of the CONTRACT (JEA RFQ Solicitation 1411873446) between JEA, and CDM Smith Inc. (Company), dated XXXXX, 2025, hereafter referred to as the Agreement.

PROJECT BACKGROUND

JEA will be expanding their potable water service to JEA's Nassau Grid service area in northwest Nassau County and has selected Company to perform the design, permitting, bidding, and engineering services during construction of a new Wildlight Water Treatment Plant (WTP) and corresponding wellfield (Project). The WTP will be constructed under a multi-year site phasing plan that will allow JEA the flexibility of expanding and meeting the development needs and growth in the service area. The current anticipated phasing plan and design demand flows is included below and will be evaluated and confirmed with JEA planning as part of early-on work on the Project.

Criteria	Phase 1 (Current Project)		Phase 2 (Future Project)		Phase 3 (Future Project)	
	2028		2033		2040	
	mgd	gpm	mgd	gpm	mgd	gpm
Average Daily Flow (ADF)	0.75	521	1.50	1,042	2.25	1,562
Maximum Daily Flow (MDF)	1.1	764	2.25	1,563	3.38	2,347
Peak Hour Flow (PHF)	1.8	1250	3.75	2,606	5.63	3,906

The Wildlight WTP will be supplied by two, (one duty, one backup) dual-zone wells Upper /Lower Floridan Aquifer (UFA/LFA). The WTP components include ground storage tank (GST), chemical facility, finished water high service pump station, and other ancillary equipment for an automatic, operational WTP and well system. The Project will include considerations for future buildout of infrastructure, provide phasing recommendations and include site planning activities for ease of future expandability. Preliminary site plan options with initial phasing recommendations (included as part of the RFQ solicitation) for the Project are shown in **Attachment A**. These are provided to show intended potential scope of work. Site plan options and layouts will be fully vetted as part of the design efforts.

The Project site is located off US-17 approximately 6,000 feet southeast of the I-95 northbound entrance ramp and 5,000 feet northwest of the US-17 and County Road 108 intersection in Nassau County. The Project site is located within Parcel ID 50-3N-27-0000-0001-0320. The developer (Raydient) is

responsible for installation of the finished water piping services for the new Wildlight WTP for Phase 1 by June 2028, but this date has not been fully confirmed with JEA.

MAJOR PROJECT COMPONENTS

JEA requests that Company provide professional engineering services for the Project to include preliminary design, final design, opinion of probable construction cost, permitting support, assistance during bidding services, engineering services during construction, and start-up support. Based on the information provided by JEA during the scope development stage, the Project will include the following major elements:

- Two UFA/LFA production wells with approximately 2,000 – 2,500 gallons-per-minute (gpm) capacity to a depth of approximately 1,200 feet below land surface (BLS). The two new well facilities will be located on the JEA-owned parcels (Well No. 1 on-site at the WTP and Well No. 2 offsite). They will include vertical turbine pumps with variable frequency drive (VFD)-driven motor for the well pumps allowing JEA to pump across desired withdrawal ranges that align with Phase 1 and future phase water demands. Each well facility mechanical header will consist of well head assembly, valves, flow meter, piping, fittings and appurtenances. Plans for a future third well may be included if necessary to meet demand projections for future phasing.
- One, GST with cascade tray aerator and forced draft ventilation at the top of the GST for volatile hydrogen sulfide removal and capable of meeting the minimum storage volume of 4 hours at maximum daily flow (MDF). The Phase 1 size of the GST will be finalized at the 10-percent design milestone, but is anticipated to be between 0.35 MG to 0.75 MG and will depend on final material of construction (pre-stressed concrete or glass-lined). Design considerations will include additional GST considerations for operability, expandability and a site layout that allows for seamless integration of future phases. Hydraulic profile and site planning will accommodate a packed tower aeration system through 30 percent design phase that can be added to the plant design and construction should water quality results determine that forced draft ventilation and tray aerator are not acceptable for hydrogen sulfide treatment. Water quality sampling will be completed as part of the well drilling early-out package.
- A high service pump station (HSP) building will be required. Pumps will be horizontal split-case, single-stage, operated on a VFD. Options for the pump station will be explored as part of the 10 and 30 percent design phase include the following options 1) pre-engineered packaged pumping building (similar to the US-1 BPS and RiverTown RW BPS) including all VFDs, controls, pumps etc. 2) slab on grade pumping system with canopy system (similar to Greenland WTP) with separate block electrical building or 3) enclosed block building with a pumping room and electrical/controls room (similar to RiverTown WTP). Concurrence on the direction of the design must be provided prior to the 30 percent phase. For all options, phasing of the pumps or type of system will be considered for the planning period established.
- A new sodium hypochlorite chemical facility (slab-on-grade canopy with pre-engineered metal roof) that will contain the chemical meter pumps, chlorine residual monitoring station, piping, appurtenances, chemical storage tanks and a containment area to provide redundancy during filling and cleaning. The design of the Wildlight WTP will include approximately 3,500-gallon storage tank for Phase 1 providing 14 days of storage for the facility and space provision for an additional tank for future phases.

- An emergency generator and associated fuel tank (in compliance with current JEA Facility Standards) to provide emergency back-up power to run to the new Wildlight WTP and evaluation of standby power for the remote back-up production well.
- Coordination of a new primary FPL electrical service to the Wildlight WTP site and Well No. 2 and transformer.
- SCADA, controls, panels, and instrumentation for a fully automatic water pumping and storage system in accordance with JEA'S standards. The Wildlight WTP SCADA system will communicate with Central SCADA (either Yulee WRF or Ridenour WTP) using standard RTU tower.
- Site paving, grading, and stormwater conveyance and stormwater storage for the Wildlight WTP and well sites as well as the incoming access road and gravel access road. Company will discuss and provide recommendations from JEA's resiliency study to the proposed site.
- Final site appurtenances including fencing, gates, and landscaping in accordance with the JEA standards and Nassau County Development Code.
- Planning and coordination to accommodate site security features including cameras, site-lighting, fence sensors, building access, and facility automatic gates in accordance with JEA's standards.
- Yard piping and other piping appurtenances for the site, productions wells, and utilities into and out of the site.

Company will perform the work through the design-bid-build delivery method with one construction bid phase. Company anticipates delivering the Project services under the following associated tasks.

Task 1 Project Kick-Off Meeting and Data Collection

Task 2 Demand Projections and Master Planning

Task 3 30-Percent Conceptual Design Package

Task 4 60-Percent Design Package

Task 5 90-Percent Pre-Final Design Package

Task 6 100-Percent Final Design/Issued for Bid Documents Package

Task 7 Permitting Assistance

Task 8 Bidding Assistance

Task 9 Services During Construction – Well Drilling

Task 10 Services During Construction

Task 11 Project Management and Quality Control

Task 12 Additional Engineering Services

Task 13

SCOPE OF WORK

The following is a description of the services to be provided by Company. A preliminary index of drawing list is included as **Attachment B**.

TASK 1 - PROJECT KICK-OFF MEETING AND DATA COLLECTION

This task provides for the Project coordination, preparation, and participation in the Project Kick-Off Meeting at JEA-selected location and requesting and evaluating Project-specific data provided by JEA.

Subtask 1.1 - Kick-Off Meeting

Company will plan and participate in a Project Kick-Off Meeting with JEA's staff and will present a work plan strategy that addresses the expectations for the Project, lines of communication, Project participants, Project goals, critical success factors, coordination of Project activities, Project schedule, and Project design standards.

An overall schedule for implementation of the Project will be prepared. Company will undertake internal and external coordination for the meeting as well as prepare and submit the meeting agenda and meeting minutes. Final meeting minutes will be distributed to JEA.

Subtask 1.2 - Data Collection and Review

Company's subconsultant (ETM) will provide the legal description, property survey, zoning and other available data on the existing property as well as the access entrance and any other information pertinent to the Project. Company will review the available information, and applicable information will be incorporated into the design. Company will develop a tracking system (spreadsheet) to manage the data/information requested and received. Company will review existing and retrieved data/information and then prepare and submit via email the evaluated data/information including the need for further data/information collection.

TASK 2 - DEMAND PROJECTIONS AND MASTER PLANNING

Subtask 2.1 - Setting Demand Projections

Company will coordinate with JEA to finalize planning horizons for the future phasing of the Project. These efforts will include defining dates for upgrades described in Major Project Components through hydraulic efforts based on demand projections. Setting these demand projections will require in depth coordination with JEA and subconsultant on review of the existing hydraulic model provided by JEA and review of the Wildlight multi-phase development master plan. Coordination efforts for setting the demand projections will include two (2), one-hour virtual meetings with JEA Planning to set assumptions, review the existing information, and address questions or concerns.

Subtask 2.2 - Master Planning Design Report

The Master Planning Design Report will focus on summarizing planning horizons on future phasing determined in Subtask 2.1 and outlining the major components of the Project. The Master Planning Design Report will also serve as the 10-percent schematic design document for the Project.

The Master Planning Design Report will also include the following information:

- Project description summary.
- Process flow diagram.
- Description of hydraulic model and updates to address proposed improvements.
- Site layout options, recommendations, and phasing layouts – site plan finalized under Task 2.
- Description of site characteristics and intended stormwater management, road access, and final grade
- Major equipment list for Phase 1.
- Recommend the suggested number of pumps and operating pressures for each planning period. Finalized detailed pumping calculations will be verified as part of the 30-percent conceptual design phase.
- Summary of design parameters by process.
- Discussion of project risks and development of a risk register to track throughout project.
- Project schedule.
- Opinion of probable construction cost estimate (Class 4).
- List of applicable permits and associated timeframes for submission and approvals.

Following the submittal of the draft Master Planning Design Report, a review meeting will be held with JEA's staff to review and discuss review comments as well as discuss future actions including further advancement of the design to 30-percent. Company will prepare an agenda and transmit the meeting minutes. Comments will be incorporated into a final Master Planning Design Report and be submitted to JEA.

Subtask 2.3 - Resiliency Review

Company will implement a resiliency study to establish an understanding of current and future flood risk associated with the proposed Wildlight WTP site. Company will utilize JEA's ongoing System Resiliency Program to evaluate flood risks and develop a flood elevation for use in developing minimum design criteria for the wellfield design, including equipment and dry floodproofing and minimum elevations for sensitive equipment, and other adaptation strategies to reduce the risk of adverse impact from severe weather events. Company will attend a one-hour call with JEA's Resiliency Team to discuss criteria for the new Wildlight WTP and wellfield and conceptual plan for setting critical infrastructure elevations and impacts to the overall site. Company will include the design criteria established under this subtask and discussions with JEA as part of the Master Planning Design Report final document.

Subtask 2.4 - Surveying Services

Company will be responsible for providing the services of a local surveyor for the preparation of additional surveys for the design activities including ASCE 38-02 quality level B designating subsurface utilities. The local surveyor has already performed surveys of the proposed Wildlight WTP site, but additional survey must be performed. The survey for these additional areas will include boundary, topographic, and easement corridor to the site area. Company will subcontract the services of a

separate firm to complete utility locates and soft-digs as deemed necessary for potential underground verification of tie-in point and conflicts (up to 7 soft-digs have been budgeted under this subtask). The results of the soft-dig investigation will be used to modify the existing utilities (if needed). Any additionally-required soft digs will be included and authorized separately, under Task 13.

TASK 3 - 30-PERCENT CONCEPTUAL DESIGN PACKAGE

Subtask 3.1 - High Service Pump (HSP) Station Evaluation

Using the demand projections and modeling results from Task 2, Company will evaluate options for implementation of the HSP station. The results of this subtask will be a short technical memorandum outlining each options' design criteria, plans for future phasing, a high-level comparison of costs between each, advantages and challenges, and recommendation. The following options will be evaluated 1) pre-engineered packaged pumping building (similar to the US-1 BPS and RiverTown RW BPS) including all VFDs, controls, pumps etc. 2) slab on grade pumping system with canopy system (similar to Greenland WTP) with separate block electrical building or 3) enclosed block building with a pumping room and electrical/controls room (similar to RiverTown WTP). Concurrence on the direction of the design must be provided prior to completion of the 30 percent phase. For all options, phasing of the pumps or type of system will be considered for the planning period established. A review meeting of the technical memorandum will be held to discuss the findings and finalize a path moving forward.

Subtask 3.2 - 30-Percent Conceptual Design Report

Following approval of the Master Planning Design Report, Company will develop a 30-Percent Conceptual Design Report, as specified herein, to be submitted to JEA for review. The 30-Percent Conceptual Design Report will provide an overview of the proposed upgrade designs, including mechanical layouts of the new wellfield and process structures, yard-piping routing, updated civil layout including grading and proposed stormwater management facilities and access road design within the site and easement corridor to the site and offsite Well No. 2.

The 30-Percent Conceptual Design Report and Drawings will include the following information:

- Drilling and Testing Plan (Production Wells No. 1 and No. 2)
- Project Description Summary.
- Site Layout.
- Process Flow Diagram.
- Summary of Design Parameters/Criteria for various Disciplines.
- Calculations/Sizing of the Major Equipment.
- Tabular Summary of Equipment Design Basis and Equipment Design Basis.
- Process and Instrumentation Diagrams (P&IDs).
- Plan Views and Major Elevation Drawings for Process Mechanical.
- Site Survey Finalized.
- Site Plan with Grading, Paving, and Landscaping.
- Draft Geotechnical Evaluations and Conclusions

- Electrical Single Line Diagrams Drawings.
- Updated Risk Register.
- Opinion of Probable Construction Cost Estimate (Class 3).
- List of Anticipated Specifications, Table of Contents.
- Construction Sequence.
- List of Applicable Permits and Associated Timeframes for Submission and Approvals.

Following the submittal of the 30-Percent package, a review meeting will be held with JEA's staff to review and discuss review comments as well as discuss future actions including further advancement of the design to 60-percent. Company will prepare an agenda and transmit the meeting minutes.

Subtask 3.3 - Geotechnical Investigation

Under this task, Company will subcontract the services of a geotechnical engineering firm to perform geophysical study, exploratory work, laboratory and field testing, and professional guidance in tests to be made at test locations based on drawings and designs, including professional interpretations of exploratory and test data. The following geotechnical field services are included. Geotechnical field services for future phase infrastructure are not included.

Test Location	Test Type and Number	Test Depth
Production wells	SPT - Two (1 each)	20 ft
GST No. 1	SPT-Five	Four at 50 ft One at 100 ft
Sodium Hypochlorite Canopy/Building	SPT - Two	20 ft
Electrical Building	SPT - One	20 ft
Diesel Generator/Fuel Tank	SPT - One	20 ft
Pipelines	SPT - Three	15 ft
HSP (Phase 1) Building	SPT - One	20 ft
Miscellaneous (broadband tower)	SPT - One	50 ft
Stormwater Pond Area Soil Penetration Test	2 Auger Borings	10 ft
Stormwater Pond DRI Test	DRI Test - One	N/A
Paved Access Road	4 Auger Borings	6 ft
Gravel Access Road (optional)	3 Auger Borings	6 ft

A draft and final Geotechnical Report will be prepared under this subtask by Company's subconsultant and will be reviewed by Company's geotechnical team. The report will include the following for initial and future phase infrastructure: observed site conditions as they relate to the anticipated construction; field and laboratory test procedures used and results obtained; encountered subsurface conditions, geotechnical engineering evaluation of the site and subsurface conditions (including groundwater) with respect to the anticipated construction; settlement analyses for the HSP station building, chemical building, wellfield, and diesel generator/fuel tank, recommendations for foundation preparation and design parameters, including recommendations for the GST and wellfield subsurface preparation; recommendations for dewatering; use of on-site material as fill or backfill, and recommendation or testing during site preparation and earthwork construction. This work will be performed by one of Company's subconsultants for this Project. Company's PM and other appropriate staff will coordinate

with the subconsultant, provide the parameters and bounds of this work, liaison between JEA and the subconsultant, if necessary, and receive and review the initial draft reports.

Subtask 3.4 - Pre-Final and Final/IFB Design Package – Early Work, Well Drilling Bid Package

Following the 30-percent design meeting with JEA, Company will advance the well drilling construction through a pre-final (90%) and 100-percent final design (Issued for Bidding, IFB) for early bid package release. This will include advancing the design drawings and technical specifications necessary to create a subset bidding package on the Project. Company will present a pre-final design package set as part of this subtask for JEA's review. A one-hour meeting will be held with JEA for the review of the design package. Comments will be addressed following the meeting and Company will prepare the IFB Design Documents for the initial site access work, site clearing, and production well drilling construction work. JEA will be responsible for providing updates to the final Front-End Documents (Division 0) and advertising for the bids. The following documents will be provided as part of the final IFB Documents Package for the Well Drilling Bid Package:

- Bid set drawings.
- Bid set technical specifications.
- Final bid form.

Activities completed and released as part of this task will be synchronized with the approval of required permits under Task 7 (Permitting).

TASK 4 - 60-PERCENT DESIGN PACKAGE

Following approval of the 30-Percent Design Package, Company will provide production and submittal of the overall remaining 60-Percent Design Package for JEA. This effort includes the development across the disciplines for the 60-percent design drawings, technical specifications, additional advancements to process mechanical in accordance with P&ID, sequence of construction and updated civil/site drawings. The 60-Percent Design Package will include the following information:

- 60-percent design drawings.
- 60- percent design technical specifications.
- Updated risk register.
- Updated Opinion of Probable Construction Cost (Class 2 Level) with cost-variance analysis.

Following the submittal of the 60-Percent Design Package, JEA's staff will review and send review comments as well as discuss future actions including the advancement of the design. An in-person meeting will be held to review JEA's comments. Company will prepare an agenda and transmit meeting minutes, capturing additional comments or action items required to advance the project. Comments discussed at the meeting will be incorporated into future deliverables.

TASK 5 - 90-PERCENT PRE-FINAL DESIGN PACKAGE

Following the approval of the 60-percent design documents and based on the direction received from JEA, Company will advance the design to the 90-percent design documents. JEA will be responsible for providing the Front-End Documents (Division 0) with Company providing necessary information and

coordination with subsequent specifications. A final constructability review will also be performed at this milestone. Copies of the 90-percent design documents, as specified herein, will be submitted to JEA for review. The submittal will include the following information:

- 90- percent design drawings.
- 90- percent design technical specifications.
- Final design calculation notebook.
- Updated risk register.
- Updated opinion of probable construction cost estimate (Class 1) with variance report.
- Updated schedule.

Following the submittal of the 90-percent design package, JEA's staff will review and send review comments as well as discuss future actions including the advancement of the design. An in-person meeting shall be held to review JEA's comments. Company will prepare an agenda and transmit meeting minutes, capturing additional comments or action items required to advance to project. Comments discussed at the meeting will be incorporated into future deliverables.

TASK 6 - 100-PERCENT FINAL DESIGN/ISSUED FOR BID DOCUMENTS PACKAGE

Subtask 6.1 - 100-Percent Design Package

Following discussion of the review comments from the 90-percent design, Company's internal constructability review, regulatory approval under Task 7, and based on mutually agreed upon changes thereafter, Company will advance the design to the 100-Percent Design Package. This set will serve as the final set of documents for JEA's review prior to issuing the Issued for Bid Documents Package (Subtask 6.2, below). JEA will be responsible for providing the Final Front End Documents (Division 0) with Company providing the necessary information and coordination with subsequent specifications. The submittal will include the following information:

- 100-percent design drawings.
- 100-percent design technical specifications.
- Final risk register (used to develop Supplemental Work Allowance for JEA bid).
- Opinion of probable construction cost estimate (Class 1 Level) with cost-variance analysis.
- Draft bid form.

Following the submittal of the draft 100-Percent Design Package, a final design review meeting will be held with JEA's staff to receive and discuss final review comments to finalize the design package and prepare for bidding. Company will prepare an agenda and transmit meeting minutes from this meeting. Company will incorporate the final review comments into the final Issued for Bid Design Package.

Subtask 6.2 - Issued for Bid (IFB) Documents Package

Company will prepare IFB Design Documents following the completion of the 100-Percent Design Package submittal for the work. JEA will be responsible for providing updates to the final Front-End

Documents (Division 0) and advertising for the bids. The following documents will be provided as part of the final IFB Documents Package:

- Bid set drawings.
- Bid set technical specifications.
- Final bid form.

TASK 7 - PERMITTING ASSISTANCE

This task includes the services required for preparing and submitting appropriate permit application forms and supporting documentation, attending meetings with regulatory agencies and responses to requests for additional information as specified herein. Currently, it is understood that the following regulatory agencies in each subtask are required for the project.

Subtask 7.1 - County Development Review Committee (DRC) Review

Company will hold a preliminary application meeting with Nassau County DRC. The purpose of this meeting will be to describe the project and review the proposed site plan and garner concurrence on requirements of Nassau County. Company will assist JEA with applying for the Nassau County DRC permit, which will be required for both sets of bidding documents. This assistance will include preparing and submitting the permit application including the associated exhibits and drawings. Nassau County DRC may submit a request for additional information (RAI). Preparation of responses for one RAI from Nassau County DRC has been budgeted. Comments received from Nassau County DRC that impact the design drawings will be incorporated into the 100-Percent Design Package (if not before) prior to their issuance to JEA for bid advertising. Each transmittal to Nassau County DRC will be copied to JEA.

Subtask 7.2 - Florida Department of Environmental Protection (FDEP) Specific Permit to Construct PWS Components

Company will coordinate with JEA and participate in an initial contact with FDEP to inform them of the project. Company will assist JEA with applying for the FDEP PWS, which will include preparing and submitting the permit application including the associated exhibits and drawings. FDEP may submit a RAI. Preparation of responses for one RAI from FDEP has been budgeted. Comments received from FDEP that impact the design drawings will be incorporated into the 100-Percent Design Package (if not before) prior to their issuance to JEA for bid advertising. Each transmittal to FDEP will be copied to JEA.

Subtask 7.3 - St. Johns River Water Management District (SJRWMD) Consumptive Use Permit (CUP) Modification

Liquid Solutions Group is currently performing permitting efforts under a separate JEA contract for CUP modifications. As needed, Company will participate in an initial pre-application meeting with SJRWMD to discuss the CUP permitting and ahead of the completion of the Master Planning Document in Task 2. Company will assist JEA with applying for the letter modification for CUP #88271 (reallocation), which will include preparing and submitting the permit application including the associated exhibits and drawings. SJRWMD may issue a RAI, and preparation of a response to one RAI from SJRWMD has been budgeted. Comments received from SJRWMD that impact the design drawings will be incorporated into the 100-Percent well design package (Bid Phase A) (if not before) prior to their issuance to JEA for bid advertising. Each transmittal to SJRWMD will be copied to JEA. Should the CUP permitting strategy

change following the initial meeting with the SJRWMD, Company will discuss with JEA and any additional services beyond the letter modification strategy be authorized under Task 12 (Additional Engineering Services).

Subtask 7.4 - SJRWMD/FDEP Environmental Resource Permit (ERP)

Company will hold an initial pre-application meeting with SJRWMD/FDEP to discuss the ERP permitting. Company will assist JEA with applying for the ERP, which will include preparing and submitting the permit application including the associated exhibits and drawings. SJRWMD/FDEP may issue an RAI, and preparation a response to one RAI from SJRWMD/FDEP has been budgeted. Comments received from SJRWMD/FDEP that impact the design drawings will be incorporated into the 100-Percent Design Package (if not before) prior to their issuance to JEA for bid advertising. Each transmittal to SJRWMD/FDEP will be copied to JEA.

Subtask 7.5 - FDOT Right-Of-Way (ROW) and Maintenance of Traffic (MOT)

Company will hold a pre-application meeting with FDOT to discuss the FDOT permitting required for the Project's construction and proposed new driveway/connection from US-17. The purpose of this meeting will be to describe the Project and review the proposed site plan and garner concurrence on FDOT requirements. It is anticipated that an FDOT Driveway/Connection Application and FDOT ROW Permit will be required for this Project. Company will assist JEA with applying for the FDOT ROW permit, which will be required for both sets of bidding documents. This assistance will include preparing and submitting the permit application including the associated exhibits and drawings. Preparation of a response to one RAI from FDOT has been budgeted. Comments received from FDOT that impact the design drawings will be incorporated into the 100-Percent Design Package (if not before) prior to their issuance to JEA for bid advertising. Each transmittal to FDOT will be copied to JEA.

Subtask 7.6 - Nassau County Building Department

Company will provide signed and sealed drawings to the awarded Contractor for them to use to obtain the required Nassau County building permit(s). Company will provide a response to one RAI. The Contractor is responsible for submitting and filling out the applications and all coordination efforts with Nassau County.

TASK 8 - BIDDING ASSISTANCE

Subtask 8.1 - Bidding Assistance

This task provides for Company services during the bidding phases for the Project. Company will perform the work through the Design-Bid-Build delivery method for the construction of the project. Under this subtask, the following services will be provided by Company for the two bid packages::

1. Company's PM will attend the pre-bid conference along with JEA staff.
2. Interpret and/or clarify construction contract documents to potential bidders' technical questions.
3. Support JEA with Drawing and/or Specification updates for addenda issuance. JEA will coordinate and issue the addenda.

Note that JEA will be responsible for coordinating and issuing all addenda as well as conducting the bid openings. Company is not required to attend the various bid openings for the Project. Bidding assistance services end with issuance of the Award of Contract by JEA.

Subtask 8.2 - Conformed Contract Documents

After the Contracts have been awarded to the Contractors by JEA, and after directive issued by JEA, Company will develop Conformed Documents (technical specifications and drawings only). Company will combine drawing and specification modifications by addenda into the Conformed Documents. After the documents are conformed, Company will provide the Conformed Contract Documents to JEA and the Contractor. In addition, a digital version of the Conformed Documents (CAD and .pdf) will be submitted to JEA and Contractor. This Subtask will end with the issuance of Conformed Contract Documents to JEA.

TASK 9 - SERVICES DURING CONSTRUCTION – WELL DRILLING

Subtask 9.1 - Pre-Construction Meeting

Company staff will attend and participate in a pre-construction meeting to answer technical questions. Company will prepare meeting minutes of the pre-construction meeting and provide these minutes to JEA for distribution to the attendees.

Subtask 9.2 - Well Drilling Construction Oversight Services

Company will provide engineering services during the Production Well No. 1 and Backup Well No. 2 well construction and testing through its Onsite Resident Hydrogeologist for observation during the key portions of construction and testing phases. Note the wells will be drilled in succession of each other and it is assumed each well will take 5 months to complete. The services for Company under this task will include:

- Hold monthly well drilling update meetings (up to 10 meetings are included in the Scope of Work for Company's Hydrogeologist/Project Manager for a duration of 1 hours per meeting).
- Provide qualified Hydrogeologist during well drilling, construction, and testing. Company estimates the completion of each well will require approximately 300 labor-hours (600 labor-hours total) of oversight and coordination during drilling operations.
- Compile, evaluate, and interpret hydrogeologic data obtained during well construction and testing. Hydrogeologic data including lithologic sample descriptions, drill stem water quality sampling, video and geophysical logging data, and variable- and constant-rate pumping test data.

During well drilling and construction, the Onsite Resident Hydrogeologist will:

- Conduct visual inspection and review suitability and storage methods of materials, equipment, and supplies delivered to the well construction sites.
- Accompany visiting inspectors representing the public or other agencies that have jurisdiction over the project, as requested by JEA.
- Observe setting and grouting of surface casing from land surface to competent geology as necessary for well construction.

- Observe setting and grouting of final casing from land surface to about 500 feet below land surface (bls). This bls reference is estimated depth to the top of competent rock within the UFA. Actual casing settings and well depths will be determined based on the site-specific hydrogeologic conditions and combined with regulatory constraints.
- Observe the drilling of the nominal open borehole. Characterize the geology through inspection of drill cuttings. Perform field testing of water samples for specific conductance, chlorides, sulfates, pH, and temperature.
- Water quality sampling will be conducted by CONTRACTOR, and the water quality analyses to comply with regulatory requirements will be conducted an independent laboratory.
- Observe, evaluate, and interpret geophysical and video logging of the completed production wells.
- Conduct step drawdown tests and constant-rate pumping test in accordance with SJRWMD's requirements.
- Analyze the step drawdown and constant-rate tests for well performance and aquifer characteristics.
- Provide copies of all field reports, including daily logs when the resident hydrogeologist is on site.

Subtask 9.3 - Shop Drawing Submittal Reviews

Under this task, Company will assist JEA by providing review of technical documents submitted by the Contractor. The project budget is estimated based on up to a total of 15 total shop drawings (A and B submittals). The basis of this submittal list is based on what is anticipated on the Project and previous similar work for JEA. Shop drawings from the well drilling contractor will be submitted electronically to the Company and JEA concurrently to facilitate review of these submittals. Shop drawing logs will be maintained by the Company and copies will be provided to document receipt and return of the submittals.

Subtask 9.4 - Request for Information (RFIs)

Under this task, Company will respond to Contractor RFIs (up to five) related to the Contract Documents. RFIs from the Contractor will be submitted electronically to the Company and JEA concurrently to facilitate review of these RFIs. RFI logs will be maintained by the Company and provided to document receipt and return of the RFIs.

Subtask 9.5 - Letter Report (Production Well No. 1 and Backup Well No. 2)

A draft letter report will be prepared and submitted to OWNER following completion of Production Well No.1 and Backup Well No. 2. The letter report will describe new well construction details and the results of the step drawdown tests. JEA will review the draft letter report and provide comments to Company for the final letter report. Company will incorporate comments into a final letter report and will provide two hard copies to JEA and to SJRWMD. The letter report will contain the following:

- Well completion report
- Aquifer characteristics from the step drawdown test
- Geophysical and video logs and analysis
- Results of groundwater quality analysis

- General Assessment of hydrogeologic conditions
- Provided bases of design for the size of the pump and pump setting depth
- Assessment of suitability for water supply purpose

TASK 10 - SERVICES DURING CONSTRUCTION

Subtask 10.1 - Pre-Construction Meeting

Company staff will attend and participate in a pre-construction meeting to answer technical questions. Company will prepare meeting minutes of the pre-construction meeting and provide these minutes to JEA for distribution to the attendees.

Subtask 10.2 - Monthly Site Visits and Monthly Status Meetings

Company's project manager (PM) (or JEA-approved substitute) and project engineer will visit (or walk through) the site prior to the start of each progress meeting (a total of 22 status meetings have been assumed for construction activities) to observe, as an experienced and qualified design professional, the progress and the quality of the executed work of the Contractor and determine, in general, if such work is proceeding in accordance with the Contract Documents. The Company's PM will identify errors or deficiencies in the work observed during the walk-through, during the progress meeting, and in the site trip reports. This task will include up to three site visits from the engineering disciplines.

These site visits will be conducted to observe construction activity, evaluate conformance with the Contract Documents, and resolve design related issues with the Contractor, particularly related to equipment installation, electrical system, and control system installation and programming. Site visit reports and construction progress minutes will be produced and submitted to JEA to document observations during the site visits and discussions/decisions occurring during the progress meetings.

Subtask 10.3 - Shop Drawing Submittal Review

Under this task, Company will assist JEA by providing review of technical documents submitted by the Contractor. The project budget includes time for up to 312 shop drawings (a total of 208 initial shop drawing review and 104 resubmittals). The basis of this submittal list is based on what is anticipated on the project and previous similar work for the JEA. Shop drawings from the Contractor will be submitted electronically to the Company and JEA concurrently to facilitate review of these submittals. Shop drawing logs will be maintained by the Company and copies will be provided to document receipt and return of the submittals.

Subtask 10.4 - Request for Information (RFIs) and Design Clarifications

Under this task, Company will respond to Contractor RFIs (up to 45) related to the Contract Documents and issue up to three design clarifications. RFIs from the Contractor will be submitted electronically to the Company and JEA concurrently to facilitate review of these RFIs. RFI logs will be maintained by Company and provided to document receipt and return of the RFIs.

Subtask 10.5 - Asset Management Information Submittals

Company will review Contractor-submitted Vendor Asset Management information for accuracy during the project construction. JEA will be responsible for providing Company with the Microsoft Excel-based template that will make it seamless for JEA to incorporate asset management information.

Subtask 10.6 - Review and Approval of Vendor Operations and Maintenance (O&M) Manuals

Company will review and comment on the Final Vendor O&M Manuals for the installed equipment. For this effort, Company has assumed up to 20 separate manuals for various pieces of equipment, some of which could be in combination with other associated equipment. Company will provide appropriate language within the specifications to be consistent with the referenced number of separate manuals. If individual O&M manuals are deemed acceptable by Company, they will be approved in writing. If Company deems any specific O&M manual to be deficient and/or in error, Company will notify JEA, in writing, as to the noted deficiencies and/or errors. This will include up to one additional resubmittal review.

Subtask 10.7 - Start-Up and Performance Testing

The Contractor will be responsible for arranging and conducting the startup test for major equipment. Company will review the submitted test plans and test reports from the suppliers for the pump equipment testing and review the certified performance testing results. The witness, start-up and performance testing will be conducted by Company's discipline engineer representatives for process mechanical, HVAC, electrical and instrumentation.

Company has assumed the following personnel and on-site time duration for startup/performance testing is below. Any additional efforts shall be discussed with JEA during the services during construction phase and usage of Task 11 – Additional Engineering Services.

1. Process/Mechanical Engineer – estimated total of 40 labor hours for up to four site visits to observe startup of the HSP, chemical facility and ancillary WTP equipment.
2. Electrical Engineer – estimated total of 32 labor hours for up to four site visits to observe startup of the HSP, chemical facility and electrical gear including generator.
3. Instrumentation and Controls Engineer – estimated total of 24 labor hours for up to three site visits to assist with startup of the I&C package including I/O checkouts.

Subtask 10.8 - Substantial and Final Completion/Acceptance and FDEP Certification

Company will participate in two completion walk-through events and prepare a written punch list for the items remaining in the Contract. The first walk-through will occur with JEA staff, Company, and the Contractor. The second walk-through will occur with JEA, Company, and the Contractor to check that the work has been corrected and is ready for a final inspection and approval. In accordance with permit requirements, Company will prepare the FDEP, CUP, and ERP certifications of compliance, as appropriate, with the necessary attachments. JEA will sign as JEA and Operating Entity, if required.

If additional walkthroughs are required, Company reserves the right to seek additional compensation.

Subtask 10.9 - Record Drawings Preparation and Submittal

Company, using red-lined drawing mark-ups and certified as-built survey prepared by the Contractor, will prepare and submit to JEA record drawing, signed/sealed and stamp signed by Company as well as one electronic copy in ACAD (.dwg) and PDF (.pdf). The signed and sealed record drawing sets will be provided per JEA Standards with the record drawing stamp and the discipline Engineer of Record P.E. stamp.

TASK 11 - PROJECT MANAGEMENT AND QUALITY CONTROL

Activities performed under this task consist of those general functions required to maintain the project on schedule, within budget, and that the quality of the work products defined within this Scope of Work are consistent with Company's standards and JEA's requirements. Following the issuance of the NTP from JEA, Company will perform a project planning, scope review meeting and a project health and safety plan. Additionally, Company maintains a Quality Management System (QMS) on all projects. This task includes monthly invoicing, progress reporting, and schedule updates to JEA. Preparation and updates to the cash flow will be prepared and tracked each month. Project management tasks have been assumed over a 37-month time from starting of planning at NTP and through final completion on construction.

Company will hold Technical Review Committee (TRC) and Project Quality Meetings, for quality assurance and control, prior to transmitting documents to JEA. TRC meetings will be held at the 10-percent, 30-percent and 60-percent design milestones for all design milestones. Company will also perform a constructability review at the 90-percent design milestone and a comprehensive final design review at the 100-percent document. Company will maintain and submit to JEA on a periodic basis a comment and response spreadsheet that will track JEA comments and Company's response and intended actions to address the comments. Company's subconsultants will be integrated in the quality management process.

TASK 12 - ADDITIONAL ENGINEERING SERVICES

This task is for allowances to address changes to the assumptions and/or optional additional engineering services during design and construction required for the Project and as requested by JEA. As additional services are identified, Company will notify JEA in writing and prepare a document summarizing the requests along with any schedule and/or cost impacts. JEA will review and authorize funding through these additional services. Changes which go beyond the allowance set forth in Task 12 will be handled through a formal amendment to the Contract. The said services will only be performed at the expressed written direction of JEA. Items that are currently considered included within Task 12 include the following, others may apply as the design progresses based on direction from JEA.

- Design of a Packed Tower Aeration (PTA) System for enhanced hydrogen sulfide removal.
- Design of a block building with rooms for HSPs and electrical and controls.
- Design of a restroom, on-site grinder pump station, and force main connections on US 17.
- Preparation of additional bidding packages outside those outlined above to expedite the overall project schedule.

- At the time of scoping JEA Operation and Maintenance requested a detailed activity around the start-up procedures of Wildlight Water Treatment Plant with the surrounding development area services for JEA. Company will develop a proposal for efforts after the 30 percent design review meeting to be funded under this task.
- This task may include resurveying of existing protective species, additional permitting, and relocation of gopher tortoises' services.

DELIVERABLES

1. Four copies each of 10-percent and 30-percent design packages in electronic format (PDF and hard copy).
2. Draft and final geotechnical report.
3. HSP Station Evaluation Technical Memorandum (PDF and hard copy).
4. Drawings: Three half size (11" x 17") for 60-percent, 90-percent, and 100-percent (PDF and hard copy).
5. Specifications: Three copies for 60-percent, 90-percent, 100-percent (PDF and hard copy), and Issued for Bid pdf.
6. Conformed Construction Documents: One half size (11" x 17") and one full size (22" x 34") hard copies signed and sealed and in PDF format. Technical specifications, one signed and sealed hard copies (PDF and hard copy).
7. Opinion of Probable Construction Cost and Variance (PDF and EXCEL Format) for 10-percent, 30-percent, 60-percent, 90-percent and 100-percent submittal.
8. Construction Record Drawings: One signed and sealed full size (22"x 34") and in PDF and ACAD *.dwg format.
9. Meeting agendas and minutes.
10. Signed and sealed site survey sheets.

JEAS RESPONSIBILITIES

JEAS will be responsible for the following listed items and other items as specifically included in this Scope of Work:

- Provide the available site information and other requested data to Company, a list of requests will be provided at the project kickoff meeting.
- Provide the latest up-to-date available comprehensive Nassau grid potable water hydraulic model, results, pump curve and pertinent information.
- Provide associated Resiliency Plan and assessment of flood vulnerability and risk associated with current and future flood scenarios.

- Provide permit application fees.
- Provide coordinated Front-End Documents (Division 0).
- Provide bid evaluation and recommendation of award letter for Contractor(s).
- Review and approve Contractor's pay requests.
- Review and approve change orders during construction.
- Resident project representative services (unless requested by the Owner to be provided by Company)

ASSUMPTIONS

Company has made the following assumptions to determine the Scope of Work and develop fee estimates.

1. JEA shall be responsible for, and Company may rely upon, the accuracy and completeness of all existing site information, models, reports, data, and other information furnished by JEA to Company pursuant to this Agreement. Company may use such existing site information, models, reports, data, and information in performing or furnishing services under this Agreement. Company's scope of work does not include verifying JEA Provided Information for accuracy or completeness. JEA may request an independent review of JEA Provided Information by Company pursuant to a mutually agreed amendment to this Agreement. Company shall be entitled to an adjustment in price and schedule to the extent that any corrective action in Company's Services arises out of inaccurate JEA Provided Information.
2. Company has structured this scope of services based on the description of designed facilities noted in the Major Components section of the background. Any critical modifications to the type of facilities during the evaluation/recommendation phase in the Master Plan Document (10-percent phase) and meetings with JEA that require modifications will be discussed and additional effort will be submitted for review and approval through Task 12.
3. The scope of services assumes that JEA will proceed forward with the CUP Option of letter modification for CUP #88271 reallocation. If any modification to permitting strategy for the new wells is required following the SJRWMD pre-application meeting, Company will evaluate any additional efforts and will submit to JEA for review and approval through Task 12.
4. Company is not responsible for delays due to the permitting approval process. Company reserves the right to extend the schedule based on variable scheduling and review times of the regulatory agencies.
5. Company is not responsible for obtaining any easements that may be required or for any delays caused by acquisitions of easements.
6. Company does not assume responsibility for well water quality or well location. As part of the well drilling and testing, water quality will be confirmed and if any additional design efforts arise from said testing additional design efforts may be requested from JEA and authorized under Task 12.

7. Design decisions and directions in this work will be fixed after the 30-percent conceptual design meeting with JEA. Any changes to design direction or substantial modifications will be discussed with JEA and Company and implications to scope, schedule, and budget. JEA will be notified in writing of changes to the baseline scope, schedule, or budget established in the 30-percent phase.
8. SCADA integration and programming for the WTP and wells will be performed and coordinated by JEA.
9. Based on information received to from subconsultant, the wetland impacts to the project, including the access road, have already been permitted and appropriately mitigated. Company does not anticipate that the project will require additional wetland delineation or mitigation.
10. Two bid packages is included is included in Task 8 (Well Drilling Package and Remaining WTP Package).
11. Construction duration (WTP Package) is estimated at 22 months, extensions past this timeframe will require additional fees to be negotiated.
12. Besides above-mentioned assumptions, fee for Tasks 1- 11 are based on Option 1 for the HSP station, precast concrete electrical building, no restroom, GST, two production wells, sodium hypochlorite facility with canopy, and ancillary piping, electrical, security, and civil/site.
13. JEA is currently performing ESA Phase 1 and protective species survey for land acquisition. Subsequent services related to resurveying and relocation of gopher tortoises are assumed to be authorized under Task 12 if directed by JEA.
14. Fire protection of structures or buildings is not included.
15. JEA intends to develop a master plan for communications for the Wildlight area which has not begun. This proposal assume that Company will require that the Contractor subcontract with and use the services of Advantage Contracting Group (JEA vendor) to design, permit, and construct a new radio tower plus all required accessories and connect new antennas to the instrumentation and control system.
16. Tree survey services in Subtask 2.4 are not included and Company assumes that property will be deforested and cleared per the understanding during the time of scoping. Survey will take note of general conditions of site for stumps and clearing/grubbing for subsequent final clearing of the site. Any detailed tree surveys required shall be separately authorized under Task 12 at the direction of JEA.

PROJECT SCHEDULE

It is anticipated that the work will take 37 months to complete, starting within two weeks of receipt of a formal notice to proceed (NTP). The estimated schedule by task is shown below. Company will prepare an updated detailed schedule within the first 30 calendar days after NTP.

Task and Description	Estimated Task Duration	Duration From Start
Task 1 – Project Kick-Off Meeting and Data Collection	14 Days	14 Days
Task 2 – Demand Projections and Master Planning (10%)	2 Months	2.5 Months
Task 3 – 30-Percent Conceptual Design Package	2 Months	4.5 Months
Task 4 – 60 Percent Design Package	2.5 Months	7 Months
Task 5 – 90-Percent Design Package	2 Months	9 Months
Task 6 – 100 Percent Final Design/Issued for Bid Documents Packages	1 Month	10 Months
Task 7 – Permitting Assistance	Concurrent with Design Phase	-
Task 8 – Bidding Assistance	4 Months (Well Drilling) 6 Months (WTP)	8 Months (Well Drilling) 11 Months (WTP)
Task 9 – Services During Construction – Well Drilling	10 Months	12 Months
Task 10 – Services During Construction	22 Months	17 Months
Task 11 – Project Management and Quality Control	37 Months	37 Months
Task 12 – Additional Engineering Services	Across Project Duration	-
–	As Needed	-

COMPENSATION AND PAYMENT

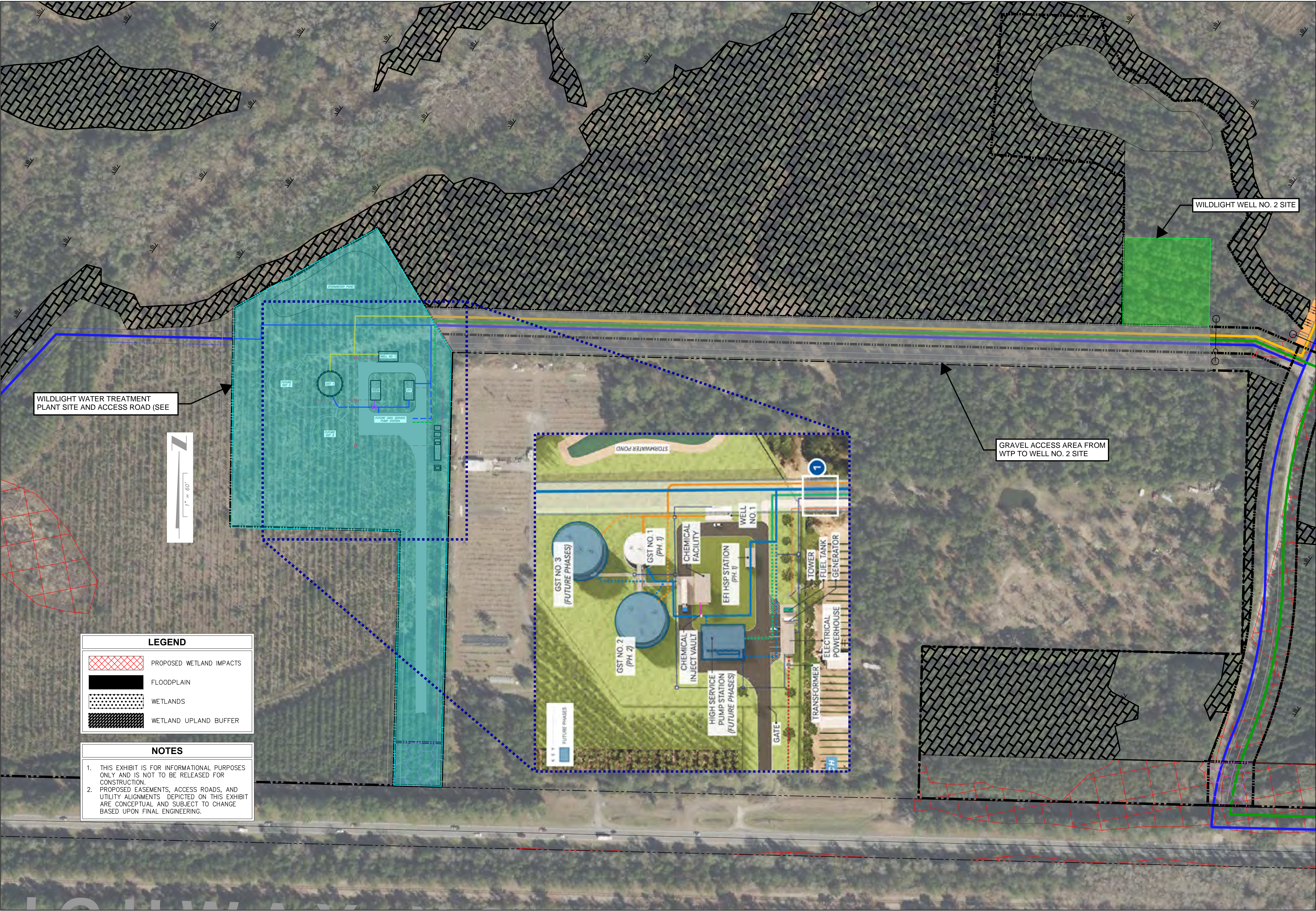
Compensation for the services described herein shall be made in accordance with the Agreement between JEA and Company. The work described in Tasks 1 through 11 will be completed as lump sum in the amount of \$2,009,940. A not-to-exceed optional task in the amount of \$100,000 is established for Task 12 – Additional Engineering Services for use by JEA. The total not-to-exceed of this Agreement is **\$2,109,940**. Company will submit monthly invoices accompanied by written monthly status reports. Company will submit monthly invoices based on the percentage of the work completed for the period of the invoice for the lump sum portions (Tasks 1 – 11). For the not-to-exceed Task 12, invoices will be submitted based on time incurred and labor billing rates plus direct costs and subconsultants. Subconsultant will be invoiced at cost plus 5% markup. A detailed labor hour fee table and associated JSEB subconsultants is included in **Exhibit 1**.

Exhibit 1 - Detailed Fee Table

Award #2 Supporting Documents 03-27-2025

Wildlight Water Treatment Plant and Wellfield		Senior Project Manager	Technical Expert	Officer	Lead Task Manager	Senior Engineer	Senior Professional	Professional III	Professional II	Professional I	Senior Tech Support	Staff Tech Support	Contract Administrator	Administrative	TOTAL HOURS	TOTAL Labor COST
Labor Category	Billing Rate	\$ 286.00	\$ 271.00	\$ 255.00	\$ 245.00	\$ 229.00	\$ 203.00	\$ 172.00	\$ 146.00	\$ 120.00	\$ 146.00	\$ 135.00	\$ 135.00	\$ 109.00		
Task 1 - Project Kick-Off Meeting and Data Collection		20	6	2	39	11	2	24	21	43	0	0	0	4	172	\$ 33,126
1.1 - Kick-Off Meeting		20	2	2	35	5	2	10	13	22	0	0	0	4	115	\$ 23,592
1.2 - Data Collection and Review		0	4	0	4	6	0	14	8	21	0	0	0	0	57	\$ 9,534
Task 2 - Demand Projections and Master Planning		53	96	2	86	18	52	116	112	210	4	24	0	20	793	\$ 144,963
2.1 - Setting Demand Projections		8	44	0	24	0	0	20	20	60	2	8	0	0	186	\$ 35,024
2.2 - Master Planning Design Report		45	52	2	60	18	52	90	86	138	2	16	0	20	581	\$ 106,101
2.3 - Resiliency Review		0	0	0	2	0	0	4	4	8	0	0	0	0	18	\$ 2,722
2.4 - Surveying Services		0	0	0	0	0	0	2	2	4	0	0	0	0	8	\$ 1,116
Task 3 - 30-Percent Conceptual Design Package		41	104	4	73	118	110	150	230	108	2	122	0	18	1080	\$ 199,231
3.1 - High Service Pump (HSP) Station Evaluation		4	4	0	6	24	4	27	48	12	0	16	0	2	147	\$ 25,476
3.2 - 30-Percent Conceptual Design Report		32	100	4	60	86	54	110	172	88	2	100	0	8	816	\$ 151,884
3.3 - Geotechnical Investigation		1	0	0	3	8	0	9	4	0	0	0	0	0	25	\$ 4,985
3.4 - Pre-Final and Final IFB Design Package – Early Work, Well Drilling Bid Package		4	0	0	4	0	52	4	6	8	0	6	0	8	92	\$ 16,886
Task 4 - 60 Percent Design Package		42	72	59	52	184	105	250	360	208	8	433	0	40	1813	\$ 307,263
Task 5 - 90 Percent Pre-Final Design Package		16	24	40	44	156	86	216	216	82	4	296	0	16	1196	\$ 206,058
Task 6 - 100 Percent Final Design/Issued for Bid Documents Package		10	30	8	30	59	54	82	58	54	2	99	0	20	506	\$ 89,742
6.1 - 100-Percent Design Package		8	30	6	26	59	48	76	46	42	2	88	0	12	443	\$ 79,881
6.2 - Issued for Bid (IFB) Documents Package		2	0	2	4	0	6	6	12	12	0	11	0	8	63	\$ 9,861
Task 7 - Permitting Assistance		10	0	0	18	0	44	4	40	26	0	0	0	6	148	\$ 26,504
7.1 - County Development Review Committee Review		8	0	0	8	0	0	2	16	4	0	0	0	0	38	\$ 7,408
7.2 - Florida Department of Environmental Protection (FDEP) Specific Permit to Construct PWS Components		0	0	0	2	0	0	2	6	12	0	0	0	2	24	\$ 3,368
7.3 - St. Johns River Water Management District (SJRWMD) Consumptive Use Permit (CUP) Modification		2	0	0	2	0	4	0	4	2	0	0	0	0	14	\$ 2,698
7.4 - SJRWMD/FDEP Environmental Resource Permit (ERP)		0	0	0	2	0	40	0	4	2	0	0	0	2	50	\$ 9,652
7.5 - FDOT ROW & MOT		0	0	0	2	0	0	0	2	2	0	0	0	0	6	\$ 1,022
7.6 - Nassau County Building Department		0	0	0	2	0	0	0	8	4	0	0	0	2	16	\$ 2,356
Task 8 - Bidding Assistance		4	4	8	16	22	2	44	64	64	42	6	0	19	295	\$ 47,237
8.1 - Bidding Assistance		4	4	4	12	20	2	36	44	40	10	4	0	0	180	\$ 30,590
8.2 - Conformed Contract Documents		0	0	4	4	2	0	8	20	24	32	2	0	19	115	\$ 16,647
Task 9 - Services During Construction - Well Drilling		6	1	0	10	0	62	20	26	687	2	16	0	1	845	\$ 109,260
9.1 - Pre-Construction Meeting		2	0	0	2	0	2	0	2	3	0	0	0	1	12	\$ 2,229
9.2 - Well Drilling Construction Oversight Services		0	0	0	4	0	40	0	4	600	0	0	0	0	658	\$ 81,684
9.3 - Shop Drawing Submittal Reviews		2	0	0	2	0	8	20	16	32	0	0	0	0	80	\$ 12,302
9.4 - Requests for Information (RFIs)		2	0	0	1	0	4	0	4	12	0	0	0	0	23	\$ 3,653
9.5 - Letter Report (Production Well No. 1 and Backup Well No. 2)		0	1	0	1	0	8	0	0	40	2	16	0	0	72	\$ 9,392
Task 10 - Services During Construction		20	18	50	86	254	10	326	944	636	2	140	4	20	2510	\$ 396,742
10.1 - Pre-Construction Meeting		2	0	0	2	4	0	2	4	2	0	0	0	0	16	\$ 3,146
10.2 - Monthly Site Visits and Monthly Status Meetings		10	0	0	32	24	0	0	104	34	0	0	0	18	222	\$ 37,422
10.3 - Shop Drawing Submittal Review		2	12	26	29	118	8	172	600	462	0	12	0	0	1441	\$ 220,449
10.4 - Requests for Information (RFIs) and Design Clarifications		4	4	12	4	38	0	68	130	36	0	4	0	0	300	\$ 50,506
10.5 - Asset Management Information Submittals		0	0	0	0	0	0	0	4	8	0	0	0	0	12	\$ 1,544
10.6 - Review and Approval of Vendor Operations and Maintenance (O&M) Manuals		2	0	12	2	20	0	34	42	24	0	0	0	0	136	\$ 23,562
10.7 - Start-Up and Performance Testing		0	2	0	8	40	0	36	16	28	0	0	0	0	130	\$ 23,550
10.8 - Substantial and Final Completion/Acceptance and FDEP Certification		0	0	0	4	2	0	8	26	18	0	0	0	0	58	\$ 8,770
10.9 - Record Drawings Preparation and Submittal		0	0	0	5	8	2	6	18	24	2	124	4	2	195	\$ 27,793
Task 11 - Project Management and Quality Control		160	0	16	185	170	0	16	0	0	0	0	128	128	803	\$ 168,079
Task 12 - Additional Engineering Services (NTE Labor CDM Smith)																\$ 100,000
Total Hours (Tasks 1 through 12)		382	355	189	639	992	527	1248	2071	2118	66	1136	132	292	10161	
% Per Labor Category		3.76%	3.49%	1.86%	6.29%	9.76%	5.19%	12.28%	20.38%	20.84%	0.65%	11.18%	1.30%	2.87%		
														TOTAL LABOR (CDM SMITH) TASKS 1-12 (LUMP SUM) \$ 1,728,205		
														TOTAL OTHER DIRECT COSTS (LUMP SUM) \$ 31,945		
														TOTAL LUMP SUM \$ 1,760,151		
														SUB LANDSCAPING (BLUE LEAF) \$ 14,070		
														SUB GEOTECH (MESKEL) \$ 45,990		
														SUB CIVIL, SURVEY AND SUE (ETM) \$ 154,494		
														SUB ROW/MOT (PETERS AND YAFEE) \$ 35,236		
														TOTAL SUBCONSULTANTS \$ 249,790		
														ADDITIONAL ENGINEERING SERVICES - Task 12 (NTE) \$ 100,000		

Attachment A – Draft Site Plan



ATTACHMENT A: WILDLIGHT WATER TREATMENT PLANT DRAFT SITE PLAN

Attachment B – Preliminary Sheet Index

Award #2 Supporting Documents 03-27-2025

Attachment B – Preliminary Sheet Index (Early Well Drilling Package)

JEA Wildlight WTP

No.	Sheet	Discipline	Description
1	G—0	General	COVER SHEET AND LOCATION MAP
2	G—1	General	INDEX SHEET
3	C—2	Civil	WTP EXISTING CONDITIONS, CLEARING PLAN, AND ADDITIONAL NOTES
4	C—3	Civil	WTP SITE PLAN AND ACCESS ROADWAY HORIZONTAL CONTROL I
5	C—4	Civil	WTP SITE PLAN AND ACCESS ROADWAY HORIZONTAL CONTROL II
6	C—10	Civil	WTP ACCESS ROAD YARD PIPING PLAN
7	C—14	Civil	WELL NO. 2 TOPOGRAPHIC SURVEY (FOR REFERENCE ONLY)
8	C—15	Civil	WELL NO. 2 EXISTING CONDITIONS, CLEARING PLAN, AND ADDITIONAL NOTES
9	C—16	Civil	WELL NO. 2 SITE PLAN

Award #2 Supporting Documents 03-27-2025

Attachment B – Preliminary Sheet Index (Remaining Work)

JEA Wildlight WTP

No.	Sheet	Discipline	Description
1	G—0	General	COVER SHEET AND LOCATION MAP
2	G—0-A	General	SIGNATURE SHEET
3	G—1	General	INDEX SHEET
4	G—2	General	GENERAL NOTES, LEGEND, SYMBOLS AND ABBREVIATIONS
5	G—3	General	PROCESS FLOW DIAGRAM
6	C—1	Civil	WTP TOPOGRAPHIC SURVEY (FOR REFERENCE ONLY)
7	C—2	Civil	WTP EXISTING CONDITIONS, CLEARING PLAN, AND ADDITIONAL NOTES
8	C—3	Civil	WTP SITE PLAN AND ACCESS ROADWAY HORIZONTAL CONTROL I
9	C—4	Civil	WTP SITE PLAN AND ACCESS ROADWAY HORIZONTAL CONTROL II
10	C—5	Civil	WTP SITE PLAN FOR FUTURE PHASES
11	C—6	Civil	WTP PAVING, GRADING AND DRAINAGE PLAN I
12	C—7	Civil	WTP PAVING, GRADING AND DRAINAGE PLAN II
13	C—8	Civil	WTP YARD PIPING PLAN I
14	C—9	Civil	WTP YARD PIPING PLAN II
15	C—10	Civil	WTP ACCESS ROAD YARD PIPING PLAN
16	C—11	Civil	WTP TO WELL NO. 2 GRAVEL ACCESS ROAD YARD PIPING PLAN
17	C—12	Civil	WTP ENTRANCE ROAD AND ACCESS DRIVEWAY
18	C—13	Civil	WTP ENTRANCE ROAD AND ACCESS DRIVEWAY SECTIONS
19	C—14	Civil	WELL NO. 2 TOPOGRAPHIC SURVEY (FOR REFERENCE ONLY)
20	C—15	Civil	WELL NO. 2 EXISTING CONDITIONS, CLEARING PLAN, AND ADDITIONAL NOTES
21	C—16	Civil	WELL NO. 2 SITE PLAN
22	C—17	Civil	WELL NO. 2 PAVING, GRADING AND DRAINAGE PLAN
23	CD—1	Civil	MISCELLANEOUS DETAILS I
24	CD—2	Civil	MISCELLANEOUS DETAILS II
25	CD—3	Civil	MISCELLANEOUS DETAILS III
26	CD—4	Civil	MISCELLANEOUS DETAILS IV
27	L—1	Landscaping	WTP TREE REMOVAL AND PROTECTION PLAN
28	L—2	Landscaping	WTP TO WELL NO. 2 TREE REMOVAL AND PROTECTION PLAN I
29	L—3	Landscaping	WTP TO WELL NO. 2 TREE REMOVAL AND PROTECTION PLAN II
30	L—4	Landscaping	WTP LANDSCAPE PLAN
31	L—5	Landscaping	WELL NO. 2 TREE REMOVAL AND PROTECTION PLAN
32	L—6	Landscaping	WELL NO. 2 LANDSCAPE PLAN
33	L—7	Landscaping	TREE INVENTORY TABLE I
34	L—8	Landscaping	TREE INVENTORY TABLE II
35	L—9	Landscaping	LANDSCAPE SPECIFICATIONS
36	A—1	Architectural	GENERAL NOTES, ARCHITECTURAL SHEET INDEX, ABBREVIATIONS AND SYMBOLS
37	A—2	Architectural	CODE SUMMARY AND DESIGN INTENT
38	S—1	Structural	GENERAL STRUCTURAL NOTES
39	S—2	Structural	WELL PAD TYPICAL SECTIONS AND DETAILS
40	S—3	Structural	EFI FOUNDATION PLAN
41	S—4	Structural	DISCHARGE FLOW METER AND GENERATOR PAD SECTIONS AND DETAI LS
42	S—5	Structural	SODIUM HYPOCHLORITE STRUCTURE FOUNDATION PLAN
43	S—6	Structural	SODIUM HYPOCHLORITE PEMB
44	SD—1	Structural	STANDARD CONCRETE DETAILS I
45	SD—2	Structural	STANDARD CONCRETE DETAILS II
46	SD—3	Structural	STANDARD MISCELLANEOUS METAL AND FRP DETAILS
47	M—1	Mechanical	MECHANICAL GENERAL NOTES AND LEGEND
48	M—2	Mechanical	WELL NO. 1 PLAN AND SECTIONS
49	M—3	Mechanical	WELL NO. 2 PLAN AND SECTIONS
50	M—4	Mechanical	GROUND STORAGE TANK PLANS
51	M—5	Mechanical	GROUND STORAGE TANK SECTIONS
52	M—6	Mechanical	GROUND STORAGE TANK SECTIONS
53	M—7	Mechanical	GROUND STORAGE TANK DETAILS
54	M—8	Mechanical	GROUND STORAGE TANK DETAILS
55	M—9	Mechanical	GROUND STORAGE TANK STAIR DETAILS
56	M—10	Mechanical	HIGH SERVICE PUMP STATION PLAN
57	M—11	Mechanical	HIGH SERVICE PUMP STATION SECTIONS
58	M—12	Mechanical	HIGH SERVICE PUMP STATION DISCHARGE FLOW METER PAD
59	M—13	Mechanical	SODIUM HYPOCHLORITE STRUCTURE PLAN
60	M—14	Mechanical	SODIUM HYPOCHLORITE STRUCTURE SECTIONS
61	MD—1	Mechanical	MISCELLANEOUS MECHANICAL DETAILS I
62	MD—2	Mechanical	MISCELLANEOUS MECHANICAL DETAILS II
63	H—1	HVAC	HVAC SYMBOLS AND ABBREVIATIONS
64	H—2	HVAC	EFI HVAC PLAN
65	H—3	HVAC	EFI AIRFLOW SCHEMATICS
66	HD—1	HVAC	EFI HVAC SCHEDULES
67	HD—2	HVAC	HVAC DETAILS
68	P—1	Plumbing	PLUMBING SYMBOLS AND ABBREVIATIONS
69	P—2	Plumbing	STANDBY GENERATOR FUEL PIPING PLAN
70	P—3	Plumbing	SODIUM HYPOCHLORITE WATER RISER DIAGRAM
71	P—4	Plumbing	RESTROOM PLUMBING PLAN
72	P—5	Plumbing	RESTROOM SANITARY RISER DIAGRAM
73	P—6	Plumbing	RESTROOM WATER RISER DIAGRAM
74	PD—1	Plumbing	PLUMBING DETAILS I
75	PD—2	Plumbing	PLUMBING DETAILS II
76	PD—3	Plumbing	FUEL SYSTEM DETAILS
77	F—1	Fire Protection	FIRE PROTECTION SYM BOLS AND ABBREVIATIONS
78	F—2	Fire Protection	SODIUM HYPOCHLORITE FIRE PROTECTION PLAN
79	FD—1	Fire Protection	FIRE PROTECTION DETAI LS
80	E—1	Electrical	ELECTRICAL LEGEND I
81	E—2	Electrical	ELECTRICAL LEGEND II
82	E—3	Electrical	ELECTRICAL NOTES
83	E—4	Electrical	WTP ELECTRICAL SITE PLAN I
84	E—5	Electrical	WTP ELECTRICAL SITE PLAN II
85	E—6	Electrical	WTP ONE LINE POWER DIAGRAM
86	E—7	Electrical	WELL NO. 1 ELECTRICAL PLAN AND SECTION
87	E—8	Electrical	WELL NO. 1 GROUNDING PLAN AND GROUNDING SCHEMATIC
88	E—9	Electrical	WELL NO. 1 ONE LINE POWER DIAGRAM
89	E—10	Electrical	WELL NO. 2 ELECTRICAL PLAN AND SECTION
90	E—11	Electrical	WELL NO. 2 GROUNDING PLAN AND GROUNDING SCHEMATIC
91	E—12	Electrical	WELL NO.2 ONE LINE POWER DIAGRAM
92	E—13	Electrical	WELL PUMP VFD CONTROL PANEL DETAIL

Award #2 Supporting Documents 03-27-2025

Attachment B – Preliminary Sheet Index (Remaining Work)

JEA Wildlight WTP

No.	Sheet	Discipline	Description
93	E—14	Electrical	GROUND STORAGE TANK AND GST DRAIN VAULT ELECTRICAL PLANS
94	E—15	Electrical	HIGH SERVICE PUMP STATION ACCESS CONTROL SYSTEM RACEWAY PLAN
95	E—16	Electrical	HIGH SERVICE PUMP STATION CCTV SYSTEM RACEWAY PLAN
96	E—17	Electrical	EFI POWER PLAN
97	E—18	Electrical	EFI LIGHTING PLAN
98	E—19	Electrical	STANDBY GENERATOR ELECTRICAL PLAN
99	E—20	Electrical	CHEMICAL BUILDING POWER PLAN
100	E—21	Electrical	CHEMICAL BUILDING LIGHTING PLAN
101	E—23	Electrical	ELEMENTARY CONTROL DIAGRAMS I
102	E—24	Electrical	ELEMENTARY CONTROL DIAGRAMS II
103	E—25	Electrical	INSTRUMENTATION AND CONTROL RISER DIAGRAM
104	E—26	Electrical	SITE SECURITY PLAN
105	E—27	Electrical	PANELBOARD SCHEDULES
106	E—28	Electrical	LIGHT FIXTURE SCHEDULE AND DETAILS
107	ED—1	Electrical	ELECTRICAL DETAILS I
108	ED—2	Electrical	ELECTRICAL DETAILS II
109	ED—3	Electrical	ELECTRICAL DETAILS III
110	ED—4	Electrical	SECURITY DETAILS I
111	ED—5	Electrical	SECURITY DETAILS II
112	I-1	Instrumentation	INSTRUMENTATION LEGEND I
113	I-2	Instrumentation	INSTRUMENTATION LEGEND II
114	I-3	Instrumentation	PROCESS AND INSTRUMENTATION DIAGRAM WELL NO. 1
115	I-4	Instrumentation	PROCESS AND INSTRUMENTATION DIAGRAM WELL NO. 2
116	I-5	Instrumentation	PROCESS AND INSTRUMENTATION DIAGRAM GROUND STORAGE AND TANK FILL
117	I-6	Instrumentation	PROCESS AND INSTRUMENTATION DIAGRAM HIGH SERVICE PUMP STATION
118	I-7	Instrumentation	PROCESS AND INSTRUMENTATION DIAGRAM SODIUM HYPOCHLORITE SYSTEM
119	I-8	Instrumentation	PROCESS AND INSTRUMENTATION DIAGRAM ELECTRICAL
120	I-9	Instrumentation	SYSTEM ARCHITECTURE
121	ID—1	Instrumentation	INSTRUMENTATION DETAILS I
122	ID—2	Instrumentation	INSTRUMENTATION DETAILS II
123	ID—3	Instrumentation	INSTRUMENTATION DETAILS III

Award #2 Supporting Documents 03-27-2025

1411873446 Design Services for Wildlight WTP Project

Vendor Rankings	Michael Dvoroznak	Muhend Hamad	Susan West	Sum of Ranks	Rank
CDM Smith	1	3	1	5	1
Mott MacDonald	2	2	2	6	2
Carollo	3	1	3	7	3

Vendor Scores	Michael Dvoroznak	Muhend Hamad	Susan West	Total
Carollo	73.75	89.50	76.25	239.50
CDM Smith	82.25	86.50	86.25	255.00
Mott MacDonald	75.25	88.25	78.50	242.00

Michael Dvoroznak	Professional Staff Experience (30 points)	Design Approach and Work Plan (40 Points)	Company Experience (25 Points)	Jacksonville Small & Emerging Business (JSEB) (5 Points)	Total	Rank
Carollo	21.75	28.00	20.00	4.00	73.75	3
CDM Smith	21.25	36.00	21.00	4.00	82.25	1
Mott MacDonald	21.25	32.00	18.00	4.00	75.25	2

Muhend Hamad	Professional Staff Experience (30 points)	Design Approach and Work Plan (40 Points)	Company Experience (25 Points)	Jacksonville Small & Emerging Business (JSEB) (5 Points)	Total	Rank
Carollo	26.50	36.00	23.00	4.00	89.50	1
CDM Smith	25.50	34.00	23.00	4.00	86.50	3
Mott MacDonald	26.25	35.00	23.00	4.00	88.25	2

Susan West	Professional Staff Experience (30 points)	Design Approach and Work Plan (40 Points)	Company Experience (25 Points)	Jacksonville Small & Emerging Business (JSEB) (5 Points)	Total	Rank
Carollo	23.25	28.00	21.00	4.00	76.25	3
CDM Smith	25.25	36.00	21.00	4.00	86.25	1
Mott MacDonald	23.50	28.00	23.00	4.00	78.50	2

Overall Averages	Professional Staff Experience (30 points)	Design Approach and Work Plan (40 Points)	Company Experience (25 Points)	Jacksonville Small & Emerging Business (JSEB) (5 Points)	Total
Carollo	23.83	30.67	21.33	4.00	79.83
CDM Smith	24.00	35.33	21.67	4.00	85.00
Mott MacDonald	23.67	31.67	21.33	4.00	80.67

1411877848 Appendix B - Bid Forms
(IFB) Electrical General Contractor Services

Submit the Response an electronic pdf in accordance with the procedures in the solicitation

Company Name: PREMIER COMMUNICATIONS GROUP, INC.

Company's Address: 260 STATE ROAD 16 ST. AUGUSTINE, FL 32084

License Number: EC13003824

Phone Number: 904-669-9670 FAX No: N/A Email Address: troy@precommgrp.com

BID SECURITY REQUIREMENTS

- ☒ None required
☐ Certified Check or Bond Five Percent (5%)

TERM OF CONTRACT

- ☐ One Time Purchase
☒ Term - 5 Years with 2 -1 year Renewal Options
☐ Other, Specify - Project Completion

SAMPLE REQUIREMENTS

- ☒ None required
☐ Samples required prior to Bid Opening
☐ Samples may be required subsequent to Bid Opening

SECTION 255.05, FLORIDA STATUTES CONTRACT BOND

- ☒ None required
☐ Bond required \$100,000.00

QUANTITIES

- ☐ Quantities indicated are exacting
☒ Quantities indicated reflect the approximate quantities to be purchased Throughout the Contract period and are subject to fluctuation in accordance with actual requirements.

INSURANCE REQUIREMENTS

Insurance required

PAYMENT DISCOUNTS

- ☐ 1% 20, net 30
☐ 2% 10, net 30
☐ Other _____
☒ None Offered

Item No.	ENTER YOUR BID FOR THE FOLLOWING DESCRIBED ARTICLES OR SERVICES:	TOTAL BID PRICE
1	Total Bid Price from Line 64 of the Bid Workbook for 1411877848	\$ 6,271,660.00

☒ I have read and understood the Sunshine Law/Public Records clauses contained within this solicitation. I understand that in the absence of a redacted copy my proposal will be disclosed to the public "as-is".

BIDDER CERTIFICATION

By submitting this Bid, the Bidder certifies that it has read and reviewed all of the documents pertaining to this Solicitation, that the person signing below is an authorized representative of the Bidding Company, that the Company is legally authorized to do business in the State of Florida, and that the Company maintains in active status an appropriate contractor's license for the work (if applicable). The Bidder also certifies that it complies with all sections (including but not limited to Conflict Of Interest and Ethics) of this Solicitation.

We have received addenda

1 through 2

Handwritten Signature of Authorized Officer of Company or Agent

01/07/25
Date

Troy Watson, President
 Printed Name and Title

1411877848 Appendix B - Bid Forms
(IFB) Electrical General Contractor Services

LIST OF SUBCONTRACTORS

JEA Solicitation Number 1411877848 requires certain major Subcontractors be listed on this form, unless the work will be self-performed by the Company.

The undersigned understands that failure to submit the required Subcontractor information on this form will result in bid rejection, and the Company agrees to employ the Subcontractors specified below: (Use additional sheets as necessary)

Note: This list of Subcontractors shall not be modified subsequent to bid opening, without a showing of good cause and the written consent of JEA.

Type of Work	Corporate Name of Subcontractor	Subcontractor Primary Contact Person & Telephone Number	Subcontractor's License Number (if applicable)	Percentage of Work or Dollar Amount
--------------	---------------------------------	---	--	-------------------------------------

N/A

Signed: _____

Company: Premier Communications Group, Inc.

Address: 260 State Road 16 St. Augustine, FL 32084


Date: January 7, 2025

1411877848 Appendix B - Bid Forms
(IFB) Electrical General Contractor Services**LIST OF JSEB SUBCONTRACTORS**

The following JSEB Subcontractors will be utilized in fulfilling the terms and conditions of a Project Authorization arising from award of JEA - 1411877848. I (We) the undersigned understand that failure to submit said information will result in bid rejection. I (We) will employ the JSEB Subcontractors specified below: (Use additional sheets as necessary)

Class of Work (Category) Dollar Amount	Name of JSEB Contractor (Indicate below)	Percentage of Total Job or

N/A

Signed: 
Company: Premier Communications Group, Inc.
Address: 260 State Road 16 St. Augustine, FL 32084
Date: January 7, 2025

Note: This list shall not be modified subsequent to bid opening without a showing of good cause and the written consent of the JEA.

1411877848 Appendix B - Bid Forms
(IFB) Electrical General Contractor Services

THE MINIMUM QUALIFICATIONS SHALL BE SUBMITTED ON THIS FORM. IN ORDER TO BE CONSIDERED A QUALIFIED BIDDER BY JEA YOU MUST MEET THE MINIMUM QUALIFICATIONS LISTED BELOW, AND BE ABLE TO PROVIDE ALL THE SERVICES LISTED IN THIS SOLICITATION.

THE BIDDER MUST COMPLETE THE BIDDER INFORMATION SECTION BELOW AND PROVIDE ANY OTHER INFORMATION OR REFERENCE REQUESTED. THE BIDDER MUST ALSO PROVIDE ANY ATTACHMENTS REQUESTED WITH THIS MINIMUM QUALIFICATIONS FORM.

BIDDER INFORMATION

COMPANY NAME: PREMIER COMMUNICATIONS GROUP, INC.

BUSINESS ADDRESS: 260 STATE ROAD 16

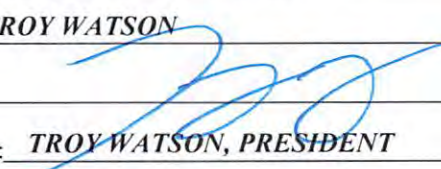
CITY, STATE, ZIP CODE: ST. AUGUSTINE, FLORIDA 32084

TELEPHONE: 904-669-9670

FAX: N/A

E-MAIL: troy@precommgrp.com, tyler@precommgrp.com, amy@precommgrp.com

PRINT NAME OF AUTHORIZED REPRESENTATIVE: TROY WATSON

SIGNATURE OF AUTHORIZED REPRESENTATIVE: 

NAME AND TITLE OF AUTHORIZED REPRESENTATIVE: TROY WATSON, PRESIDENT

MINIMUM QUALIFICATIONS:

Respondent must meet the following Minimum Qualifications to be considered eligible to have its Response evaluated by JEA. Respondent must complete and submit the Minimum Qualification Form provided in this Solicitation. Respondents that are working or have worked for JEA in the past 2 years involving similar work must submit JEA as a reference. JEA reserves the right to ask for additional back up documentation or additional reference projects to confirm the Respondent meets the requirements stated above.

JEA may reject Responses from Respondents not meeting all of the following Minimum Qualifications:

- I. Respondent must not be on the State of Florida Convicted Vendor List, State of Florida's Suspended Vendor List, the City of Jacksonville's Disqualified Vendor List, have their bidding privileges actively suspended by JEA, been debarred by JEA, or have had a contract with JEA was terminated for default within the last two (2) years.
 - Respondent shall possess and provide proof of current Florida Electrical Contractor License in conformity with Florida Statute 489.
 - Bidder shall have successfully completed three (3) similar projects in the past three (3) years ending September 30, 2024. A similar project is an electrical construction or repair project in an industrial facility. Each similar project shall have been \$50,000.00 in value or greater.

1411877848 Appendix B - Bid Forms
(IFB) Electrical General Contractor Services

PROJECT 1

Project Title **JEA CONTRACT # JEA11807 (Solicitation 1411492446) Facilities Electrical Service & Data Telecomm**

Reference Contact Name **Steven C. Tanner, JEA Communications Analyst Senior**

Reference Phone Number **Steven: 904-665-7953**

Reference E-Mail Address **tannsc@jea.com**

Contract Year/Amount **Current and previous five years \$675,00.00**

Address of Work **Various JEA locations**

Description of Project **Electrical Services**

Misc JEA projects within the scope of the Electrical Service Contract referenced:

Electrical wiring required for electrical charging stations

Panel and transformer replacements

Underground duct bank repairs

Numerous JEA station lighting replacements/ renovations

Additional Contact Name: Howard Thurman, JEA Assoc. Mgr Facilities O&M 904-665-6669 thurhf@jea.com

1411877848 Appendix B - Bid Forms
(IFB) Electrical General Contractor Services

PROJECT 3

Project Title **WTP #1 & #2 AND POLLUTION CONTROL PLANT / DISINFECTION SYSTEM**

Reference Contact Name **Sawcross, Inc. Keidi Melengu, PM**

Reference Phone Number **904-751-7500 ext 119 cell 352-214-9820**

Reference E-Mail Address **keidim@sawcross.com**

Contract Year/Amount **July, 2023 \$327,000.00**

Address of Work **City of Jacksonville Beach Wastewater Treatment Plant (910 10th St. Jax Bch**

Description of Project _____

Misc. electrical work for wiring for pumps, motors and electrical switchgear

1411877848 Appendix B - Bid Forms
(IFB) Electrical General Contractor Services

VENDOR CONFLICT OF INTEREST DISCLOSURE FORM INSTRUCTIONS

Vendors shall not try to gain an unfair competitive advantage or influence the ability of JEA officers and employees to make impartial and objective decisions on behalf of JEA.

All vendors interested in conducting business with JEA must complete and return the Vendor Conflict of Interest Disclosure Form found on the following page in order to be eligible to be awarded a contract with JEA. Please note that all vendors are subject to comply with JEA's conflict of interest policies provided below.

1. No JEA officer (e.g., JEA Board member and elected City official) or employee has an ownership interest of more than 5% in vendor's company.
2. No JEA officer or employee is an officer, director, partner or proprietor of vendor's company.
3. No JEA officer or employee is employed by or being considered for employment by vendor's company.
4. No JEA officer or employee work as a consultant or has a contractual relationship with vendor's company.
5. No JEA officer or employee will derive a personal financial gain or loss from this contract.
6. No relative of a JEA officer or employee will derive a personal financial gain or loss from this contract. (Relatives include a father, mother, son, daughter, husband, wife, brother, sister, father-in-law, mother-in-law, son-in-law, or daughter-in-law.)

If a vendor has one or more relationships with a JEA officer or employee or a relative of a JEA officer or employee that meets the criteria described above, then the vendor shall disclose the information by completing the Conflict of Interest Form on the following page.

1411877848 Appendix B - Bid Forms
(IFB) Electrical General Contractor Services



CONFLICT OF INTEREST DISCLOSURE FORM

*Disclosing a potential conflict of interest does not disqualify vendors. In the event vendors do not disclose potential conflicts of interest, and they are detected by JEA, vendor may be **disqualified** from doing business with JEA.*

Questions about this form? Contact (JEA, Buyer)

JEA Bid/Solicitation/Contract Number:	Name of JEA Employee(s) Working on Vendor's Current Contract(s) with JEA:	
Vendor Name:		Vendor Phone:
Vendor's Authorized Representative Name and Title:		Authorized Representative's Phone:
NAME(S) OF JEA EMPLOYEE(S) / PUBLIC OFFICER(S) WITH POTENTIAL CONFLICT OF INTEREST		
Name of JEA public officer(s), employee(s), or relatives with whom there may be a potential conflict of interest. If more than five, attach a second form.		Relationship of JEA public officer(s)/employee(s) and/or relative(s) to vendor's company from list above (e.g. 1(a), 2, etc.). Please list all that apply:
1.		
2.		
3.		
4.		
5.		
<input checked="" type="checkbox"/> Vendor has no conflict of interest to report.		
<input checked="" type="checkbox"/> Vendor hereby declares it has not and will not provide gifts or hospitality of any dollar value or any other gratuities to any JEA officer or employee to obtain or maintain a contract.		
<input checked="" type="checkbox"/> I certify that this Conflict of Interest Disclosure has been examined by me and that its contents are true and correct to my knowledge and belief and I have the authority to so certify on behalf of the Vendor.		
Vendor's Authorized Representative Signature:		Date:
		1/7/25

1411877848 Appendix B - Bid Forms
(IFB) Electrical General Contractor Services

FOR JEA USE ONLY IF CONFLICT NOTED

This form has been reviewed by:

Name of JEA Ethics Officer:	Signature:	Date:
Note:		

Appendix B - Rates Workbook

Electrical GC Services and Support - Bid Workbook			
LABOR RATES			
LABOR CLASSIFICATION	FIVE YEAR FORECAST (HRS)	RATE	Extended Total
Laborer	1,000.00	\$ 40.00	40,000.00
Journeyman Electrician Apprentice	3,000.00	\$ 50.00	150,000.00
Journeyman Electrician (Industrial)	12,000.00	\$ 65.00	780,000.00
Journeyman Electrician (Foreman)	3,000.00	\$ 75.00	225,000.00
Fiber Technician	500.00	\$ 65.00	32,500.00
I&C Technician	3,000.00	\$ 85.00	255,000.00
Notes		Subtotal	1,482,500.00
LABOR RATES - OVERTIME 1.5 X			
LABOR CLASSIFICATION	FIVE YEAR FORECAST (HRS)	RATE	Extended Total
Laborer Overtime	200.00	\$ 60.00	12,000.00
Journeyman Electrician Apprentice Overtime	600.00	\$ 75.00	45,000.00
Journeyman Electrician (Industrial) Overtime	2,400.00	\$ 97.50	234,000.00
Journeyman Electrician (Foreman) Overtime	600.00	\$ 112.50	67,500.00
Fiber Technician Overtime	100.00	\$ 97.50	9,750.00
I&C Technician Overtime	600.00	\$ 127.50	76,500.00
Notes		Subtotal	444,750.00
1. Double Time (2X) Labor rates are not permitted. JEA will only pay up to 1.5 X the straight time rate for Overtime hours.			
2. All trades shall be local; no travel or per diem will be paid to trades			
EQUIPMENT RATES - DAY RATES (Equipment will only be operated by Company Personnel)			
EQUIPMENT CLASSIFICATION	FIVE YEAR FORECAST	Day Rate	Extended Total
Job Truck (1/2 ton to 1 ton)	1,000.00	\$ 240.00	240,000.00
Bucket Truck	1,000.00	\$ 750.00	750,000.00
Man-lift 30'	500.00	\$ 400.00	200,000.00
Man-lift 45'	250.00	\$ 450.00	112,500.00
Man-lift 60'	200.00	\$ 950.00	190,000.00
Rough Terrain Man-lift 30'	100.00	\$ 500.00	50,000.00
Rough Terrain Man-lift 45'	80.00	\$ 650.00	52,000.00
Rough Terrain Man-lift 60'	60.00	\$ 1,250.00	75,000.00
Scissor Lift 20'	100.00	\$ 250.00	25,000.00
Back hoe - 0.5 CY	400.00	\$ 400.00	160,000.00
Back hoe - 1 CY	200.00	\$ 600.00	120,000.00
Notes		Subtotal	1,974,500.00
EQUIPMENT RATES - WEEK RATES (Equipment will only be operated by Company Personnel)			
EQUIPMENT CLASSIFICATION	FIVE YEAR FORECAST	Week Rate	Extended Total
Job Truck (1/2 ton to 1 ton)	20.00	\$ 1,050.00	21,000.00
Bucket Truck	80.00	\$ 3,500.00	280,000.00
Man-lift 30'	40.00	\$ 1,900.00	76,000.00
Man-lift 45'	30.00	\$ 2,100.00	63,000.00
Man-lift 60'	10.00	\$ 3,500.00	35,000.00
Rough Terrain Man-lift 30'	20.00	\$ 2,600.00	52,000.00
Rough Terrain Man-lift 45'	15.00	\$ 3,200.00	48,000.00
Rough Terrain Man-lift 60'	10.00	\$ 4,325.00	43,250.00
Scissor Lift 20'	80.00	\$ 1,100.00	88,000.00
Back hoe - 0.5 CY	60.00	\$ 1,700.00	102,000.00
Back hoe - 1 CY	40.00	\$ 2,500.00	100,000.00
Notes		Subtotal	908,250.00
1. Double Time (2X) Labor rates are not permitted. JEA will only pay up to 1.5 X the straight time rate for Overtime hours.			
MATERIALS MARKUP			
DESCRIPTION	Materials Estimate	PERCENT (NTE 10%)	
Materials Markup - not to exceed 10%. For materials purchased, the Company shall provide the original invoice (Company Cost) for the materials purchased by the company, apply the mark up percentage, and show Company's final Price to JEA.	250,000.00	10%	\$ 275,000.00
RENTAL MARKUP			
DESCRIPTION	Rental Forecast	PERCENT (NTE 10%)	
Rental Equipment Markup - not to exceed 10% - For specific work identified after contract execution, where JEA requires the Contractor to perform and the Contractor does not have the equipment in-house.	50,000.00	10%	\$ 55,000.00
SUBCONTRACTOR MARKUP			
DESCRIPTION	Subcontractor Forecast	PERCENT (NTE 10%)	
Subcontractor Markup - not to exceed 10% - For specific work identified after contract execution, where JEA requires the Contractor to perform and the Contractor does not have the resources in-house.	50,000.00	10%	\$ 55,000.00
Bid Subtotal			\$ 5,195,000.00
Home Office Overhead / Overhead Mark up		8%	\$ 415,600.00
Profit Margin		10%	\$ 561,060.00
SWA (MOT, Permitting, etc)			\$ 100,000.00
Total Bid Price		\$	6,271,660.00



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

7/22/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Bowen, Miclette & Britt of Florida, LLC 850 Concourse Parkway S Suite #105 Maitland FL 32751	CONTACT NAME: Michelle Rushing PHONE (A/C No, Ext): 407-647-1616 E-MAIL: mrushing@bmbinc.com ADDRESS:														
INSURED Premier Communications Group, Inc. 260 State Road 16 Saint Augustine FL 32084	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">INSURER(S) AFFORDING COVERAGE</th> <th style="text-align: left;">NAIC #</th> </tr> <tr> <td>INSURER A : Amerisure Mutual Insurance Company</td> <td>23396</td> </tr> <tr> <td>INSURER B : Amerisure Insurance Company</td> <td>19488</td> </tr> <tr> <td>INSURER C :</td> <td></td> </tr> <tr> <td>INSURER D :</td> <td></td> </tr> <tr> <td>INSURER E :</td> <td></td> </tr> <tr> <td>INSURER F :</td> <td></td> </tr> </table>	INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A : Amerisure Mutual Insurance Company	23396	INSURER B : Amerisure Insurance Company	19488	INSURER C :		INSURER D :		INSURER E :		INSURER F :	
INSURER(S) AFFORDING COVERAGE	NAIC #														
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INSURER D :															
INSURER E :															
INSURER F :															

COVERAGES

CERTIFICATE NUMBER: 1704379362

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input checked="" type="checkbox"/> LOC OTHER:	Y	Y	CPP21239280102	8/4/2024	8/4/2025	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
B	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY	Y	Y	CA21239270101	8/4/2024	8/4/2025	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$ 10,000	Y	Y	CU21239290102	8/4/2024	8/4/2025	EACH OCCURRENCE \$ 4,000,000 AGGREGATE \$ 4,000,000 \$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N	N/A	WC21239300101	8/4/2024	8/4/2025	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

The following policy provisions and/or endorsements form part of the policies of insurance represented by this certificate of insurance. The terms contained in the policies and/or endorsements supersede the representations made herein. Electronic copies of the policy provisions and/or endorsements listed below are available by emailing Contact Person as shown above.

When required by written contract, those parties listed in said contract, including the Certificate Holder, are added as an Additional Insureds with respect to the General Liability, Auto Liability and Umbrella Liability as afforded by the policy and/or endorsements.

When required by written contract, a Waiver of Subrogation, with respect to the General Liability, Auto Liability, Worker's Compensation and Umbrella s granted See Attached...

CERTIFICATE HOLDER

CANCELLATION

JEA
 Attn: Procurement Services Customer Care Center
 Jacksonville FL 32202-3139

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

AGENCY CUSTOMER ID: PREMIERCOM1

LOC #: _____

**ADDITIONAL REMARKS SCHEDULE**Page 1 of 1

AGENCY Bowen, Midlette & Britt of Florida, LLC		NAMED INSURED Premier Communications Group, Inc. 260 State Road 16 Saint Augustine FL 32084
POLICY NUMBER		
CARRIER	NAIC CODE	EFFECTIVE DATE:

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER: 25 FORM TITLE: CERTIFICATE OF LIABILITY INSURANCE

to those parties listed in said contract, including the Certificate Holder.

The General Liability certified herein are primary and non-contributory to other insurance available, but only to the extent required by written contract.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**CONTRACTOR'S BLANKET FLEX ADDITIONAL INSURED
ENDORSEMENT – FORM A**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

Policy Number CPP21239280102	Agency Number 0845507	Policy Effective Date 8/4/2024
Policy Expiration Date 8/4/2025	Date	Account Number 20086146
Named Insured PREMIER COMMUNICATIONS GROUP, INC.	Agency BOWEN MICLETTE & BRITT OF FLORIDA, LLC	Issuing Company AMERISURE MUTUAL INSURANCE COMPANY

A. SECTION II - WHO IS AN INSURED is amended to add as an additional insured:

1. Any person or organization with whom you have agreed in a "written agreement" that such person or organization be added as an additional insured on this policy, and any other person or organization you are required to add as an additional insured under such "written agreement".
2. If "your work" began under a written letter of intent or written work order, any person or organization who issued the written letter of intent or written work order, but:
 - a. such coverage will apply only for 30 calendar days following the date the written letter of intent or written work order was issued; and
 - b. the person or organization is an additional insured only for, and to the extent of, liability arising out of "bodily injury", "property damage", or "personal and advertising injury" caused, in whole or in part, by your negligent acts or omissions, or the negligent acts or omissions of others working on your behalf, in the performance of your work as specified in the written letter of intent or written work order. This coverage does not apply to liability arising out of the independent acts or omissions of the additional insured.

For the purposes of the coverage provided by this endorsement, a "written agreement" means a written contract or written agreement that:

1. requires you to include a person or organization as an additional insured for a period of time during the policy period; and
2. is executed prior to the occurrence of "bodily injury", "property damage", or "personal and advertising injury" that forms the basis for a claim under this policy.

The insurance provided by this endorsement does not apply to any person or organization that is specifically listed as an additional insured on another endorsement attached to this policy.

B. The coverage provided to any person or organization added as an additional insured pursuant to Paragraph A.1 is limited as follows:

1. If the "written agreement" specifically and exclusively requires you to name the person or organization as an additional insured using the ISO CG 20 10 endorsement with edition dates of 11 85 or 10 01, or the ISO CG 20 37 10 01 endorsement, that person or organization is an additional insured, but only with respect to liability for "bodily injury", "property damage", or "personal and advertising injury" arising out of "your work" for that insured by or for you.
2. If the "written agreement" requires you to name the person or organization as an additional insured using the ISO CG 20 10 and or CG 20 37 endorsements without specifically and exclusively requiring the 11 85 or 10 01 edition dates, that person or organization is an additional insured, but only with respect to liability for "bodily injury", "property damage", or "personal and advertising injury" caused, in whole or in part, by your acts or omissions or the acts or omissions of those acting on your behalf.
3. If the "written agreement" requires you to name the person or organization as an additional insured for operations arising out of your work and does not specify an ISO additional insured endorsement, that person or organization is an additional insured, but only with respect to liability for "bodily injury", "property damage", or "personal and advertising injury" arising out of your acts or omissions, or the acts or omissions of others working on your behalf, in the performance of your work as specified in the "written agreement". This coverage does not apply to liability arising out of the sole negligence of the additional insured unless specifically required in the "written agreement".
4. If none of the above paragraphs apply, then the person or organization is an additional insured only for, and to the extent of, liability arising out of "bodily injury", "property damage", or "personal and advertising injury" caused, in whole or in part, by your negligent acts or omissions, or the negligent acts or omissions of others working on your behalf, in the performance of your work as specified in the "written agreement". This coverage does not apply to liability arising out of the independent acts or omissions of the additional insured.

However, the insurance afforded to such additional insured only applies to the extent permitted by law.

C. The insurance provided to an additional insured under this endorsement does not apply to:

1. "Bodily injury" or "property damage" included in the "products-completed operations hazard" unless the "written agreement" specifically requires such coverage (including by specifically requiring the CG 20 10 11 85). To the extent the "written agreement" requires such coverage for a specified amount of time, the coverage provided by this endorsement is limited to the amount of time required for such coverage by the "written agreement".
2. "Bodily injury", "property damage", or "personal and advertising injury" arising out of an architect's, engineer's, or surveyor's rendering of, or failure to render, any professional services, including but not limited to:
 - a. The preparing, approving, or failing to prepare or approve:
 - (1) Maps;
 - (2) Drawings;
 - (3) Opinions;
 - (4) Reports;
 - (5) Surveys;
 - (6) Change orders;

(7) Design specifications; and

b. Supervisory, inspection, or engineering services.

- D. The limits of insurance that apply to the additional insured are the least of those specified in the "written agreement" or declarations of this policy.

Coverage provided by this endorsement for any additional insured shall not increase the applicable Limits of Insurance shown in the Declarations. The limits of insurance that apply to the additional insured are inclusive of, and not in addition to, the Limits of Insurance shown in the Declarations.

- E. With respect to the coverage provided by this endorsement, **SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS**, Paragraph 4. **Other Insurance** is deleted and replaced with the following:

4. Other Insurance.

- a. Coverage provided by this endorsement is excess over any other valid and collectible insurance available to the additional insured whether:

- (1) Primary;
- (2) Excess;
- (3) Contingent; or
- (4) On any other basis.

In addition, this insurance is excess over any self-insured retentions, deductibles, or captive retentions payable by the additional insured or payable by any person or organization whose coverage is available to the additional insured.

However, if the "written agreement" requires primary and non-contributory coverage, this insurance will be primary and non-contributory relative only to the other insurance available to the additional insured which covers that person or organization as a Named Insured, and we will not share with that other insurance. For any other insurance available to the additional insured where that person or organization is not a Named Insured, this policy will share coverage with that other insurance based on the terms specified in Paragraph b. Method of Sharing below.

b. Method of Sharing

If all the other insurance permits contribution by equal shares, we will follow this method also. Under this method, each insurer contributes equal amounts until it has paid its applicable limit of insurance or none of the loss remains, whichever comes first.

If any of the other insurance does not permit contribution by equal shares, we will contribute by limits. Under this method, each insurer's share is based on the ratio of its applicable limit of insurance to the total applicable limits of insurance of all insurers.

Award #3 Supporting Documents 03-27-2025

1411877848 Appendix B - Bid Forms
(IFB) Electrical General Contractor Services

Submit the Response an electronic pdf in accordance with the procedures in the solicitation

Company Name: Cogburn Bros., Inc.
Company's Address: 3300 Faye Rd. Jacksonville, FL 32226
License Number: EC0000457
Phone Number: 9043587344 FAX No: 9043582805 Email Address: ddriggers@cogburnbros.com

BID SECURITY REQUIREMENTS

- ☒ None required
☐ Certified Check or Bond Five Percent (5%)

TERM OF CONTRACT

- ☐ One Time Purchase
☒ Term - 5 Years with 2 -1 year Renewal Options
☐ Other, Specify - Project Completion

SAMPLE REQUIREMENTS

- ☒ None required
☐ Samples required prior to Bid Opening
☐ Samples may be required subsequent to Bid Opening

SECTION 255.05, FLORIDA STATUTES CONTRACT BOND

- ☒ None required
☐ Bond required \$100,000.00

QUANTITIES

- ☐ Quantities indicated are exacting
☒ Quantities indicated reflect the approximate quantities to be purchased Throughout the Contract period and are subject to fluctuation in accordance with actual requirements.

INSURANCE REQUIREMENTS

Insurance required

PAYMENT DISCOUNTS

- ☒ 1% 20, net 30
☐ 2% 10, net 30
☐ Other _____
☐ None Offered

Item No.	ENTER YOUR BID FOR THE FOLLOWING DESCRIBED ARTICLES OR SERVICES:	TOTAL BID PRICE
1	Total Bid Price from Line 64 of the Bid Workbook for 1411877848	\$6,477,223.75

☒ I have read and understood the Sunshine Law/Public Records clauses contained within this solicitation. I understand that in the absence of a redacted copy my proposal will be disclosed to the public "as-is".

BIDDER CERTIFICATION

By submitting this Bid, the Bidder certifies that it has read and reviewed all of the documents pertaining to this Solicitation, that the person signing below is an authorized representative of the Bidding Company, that the Company is legally authorized to do business in the State of Florida, and that the Company maintains in active status an appropriate contractor's license for the work (if applicable). The Bidder also certifies that it complies with all sections (including but not limited to Conflict Of Interest and Ethics) of this Solicitation.

We have received addenda

2 through 2

Handwritten Signature of Authorized Officer of Company or Agent

01/07/24
Date

Printed Name and Title

Damon Driggers, Sr. Project Manager

Award #3 Supporting Documents 03-27-2025

1411877848 Appendix B - Bid Forms
(IFB) Electrical General Contractor Services


LIST OF SUBCONTRACTORS

JEA Solicitation Number 1411877848 requires certain major Subcontractors be listed on this form, unless the work will be self-performed by the Company.

The undersigned understands that failure to submit the required Subcontractor information on this form will result in bid rejection, and the Company agrees to employ the Subcontractors specified below: (Use additional sheets as necessary)
Note: This list of Subcontractors shall not be modified subsequent to bid opening, without a showing of good cause and the written consent of JEA.

Type of Work	Corporate Name of Subcontractor	Subcontractor Primary Contact Person & Telephone Number	Subcontractor's License Number (if applicable)	Percentage of Work or Dollar Amount
--------------	---------------------------------	---	--	-------------------------------------

N/A

Signed: 
Company: Coghurn Bros., Inc
Address: 3300 Faye Rd.
Jacksonville, FL 32226
Date: 01/07/2024


Award #3 Supporting Documents 03-27-2025

1411877848 Appendix B - Bid Forms
(IFB) Electrical General Contractor Services

LIST OF JSEB SUBCONTRACTORS

The following JSEB Subcontractors will be utilized in fulfilling the terms and conditions of a Project Authorization arising from award of JEA ~~1411877848~~ the undersigned understand that failure to submit said information will result in bid rejection. I (We) will employ the JSEB Subcontractors specified below: (Use additional sheets as necessary)

Class of Work (Category) Dollar Amount	Name of JSEB Contractor (Indicate below)	Percentage of Total Job or
N/A		

Signed: 
Company: Cogburn Bros., Inc.
Address: 3300 Faye Rd. Jax, FL 32226
Date: 01/07/2024

Note: This list shall not be modified subsequent to bid opening without a showing of good cause and the written consent of the JEA.

Award #3 Supporting Documents 03-27-2025

1411877848 Appendix B - Bid Forms
(IFB) Electrical General Contractor Services

THE MINIMUM QUALIFICATIONS SHALL BE SUBMITTED ON THIS FORM. IN ORDER TO BE CONSIDERED A QUALIFIED BIDDER BY JEA YOU MUST MEET THE MINIMUM QUALIFICATIONS LISTED BELOW, AND BE ABLE TO PROVIDE ALL THE SERVICES LISTED IN THIS SOLICITATION.

THE BIDDER MUST COMPLETE THE BIDDER INFORMATION SECTION BELOW AND PROVIDE ANY OTHER INFORMATION OR REFERENCE REQUESTED. THE BIDDER MUST ALSO PROVIDE ANY ATTACHMENTS REQUESTED WITH THIS MINIMUM QUALIFICATIONS FORM.

BIDDER INFORMATION

COMPANY NAME: Cogburn Bros., Inc.
BUSINESS ADDRESS: 3300 Faye Rd.
CITY, STATE, ZIP CODE: Jacksonville, FL 32226
TELEPHONE: (904) 358-7344
FAX: (904) 358-2805
E-MAIL: dbriggers@cogburnbros.com
PRINT NAME OF AUTHORIZED REPRESENTATIVE: Damon Driggers
SIGNATURE OF AUTHORIZED REPRESENTATIVE: D. Driggers
NAME AND TITLE OF AUTHORIZED REPRESENTATIVE: Damon Driggers, Sr. PM

MINIMUM QUALIFICATIONS:

Respondent must meet the following Minimum Qualifications to be considered eligible to have its Response evaluated by JEA. Respondent must complete and submit the Minimum Qualification Form provided in this Solicitation. Respondents that are working or have worked for JEA in the past 2 years involving similar work must submit JEA as a reference. JEA reserves the right to ask for additional back up documentation or additional reference projects to confirm the Respondent meets the requirements stated above.

JEA may reject Responses from Respondents not meeting all of the following Minimum Qualifications:

- I. Respondent must not be on the State of Florida Convicted Vendor List, State of Florida's Suspended Vendor List, the City of Jacksonville's Disqualified Vendor List, have their bidding privileges actively suspended by JEA, been debarred by JEA, or have had a contract with JEA was terminated for default within the last two (2) years.
 - Respondent shall possess and provide proof of current Florida Electrical Contractor License in conformity with Florida Statute 489.
 - Bidder shall have successfully completed three (3) similar projects in the past three (3) years ending September 30, 2024. A similar project is an electrical construction or repair project in an industrial facility. Each similar project shall have been \$50,000.00 in value or greater.

Award #3 Supporting Documents 03-27-2025

1411877848 Appendix B - Bid Forms
(IFB) Electrical General Contractor Services

PROJECT 1

Project Title KGS Units 7 & 8 4,160KV Tie Circuit
Reference Contact Name Keith Gillean
Reference Phone Number 904 665 6841
Reference E-Mail Address gillkl@jca.com
Contract Year/Amount 2022 / \$351,450.00
Address of Work Kennedy Generating Station 4377 Talleyrand Ave.
Description of Project Provide all tools, equipment, materials
and labor to install:

3600' of MV Cable circuit in (3) 4" Conduits
abovegrade and belowgrade in concrete encased
dutbank. Scope of work also include providing
all conduit supports and (3) cantilever supports.

PROJECT 2

Project Title PA Systems Upgrade at NGS
Reference Contact Name Thomas Westbrook
Reference Phone Number 904 665-4817
Reference E-Mail Address westta3@jea.com
Contract Year/Amount 2023 / \$76,699.00
Address of Work Northside Generating Station 4433 William Ostner Rd.
Description of Project Provide all tools, equipment, materials
and labor to install:

Federal Signal Speakers, control cabinets and
electronic equipment throughout NGS including
all conduit, wire and conduit supports.

Award #3 Supporting Documents 03-27-2025

1411877848 Appendix B - Bid Forms
(IFB) Electrical General Contractor Services

PROJECT 3

Project Title Electrical Contractor Supplement Work @ GEC

Reference Contact Name Mark Hogan

Reference Phone Number (904) 665-7676

Reference E-Mail Address hogan@jea.com

Contract Year/Amount 2024 / \$133,645.00

Address of Work Greenland Energy Center 6850 Energy Center Dr.

Description of Project Provide all tools, equipment, materials
and labor to install:

Inspecting, cleaning and wiring motors/breakers
up to 4160V plus pulling cable and running
conduit for various equipment.

(2) JW & (2) Apprentices w/ Service Trucks
from 09/21/24 through 11/01/24

VENDOR CONFLICT OF INTEREST DISCLOSURE FORM INSTRUCTIONS

Vendors shall not try to gain an unfair competitive advantage or influence the ability of JEA officers and employees to make impartial and objective decisions on behalf of JEA.

All vendors interested in conducting business with JEA must complete and return the Vendor Conflict of Interest Disclosure Form found on the following page in order to be eligible to be awarded a contract with JEA. Please note that all vendors are subject to comply with JEA's conflict of interest policies provided below.

1. No JEA officer (e.g., JEA Board member and elected City official) or employee has an ownership interest of more than 5% in vendor's company.
2. No JEA officer or employee is an officer, director, partner or proprietor of vendor's company.
3. No JEA officer or employee is employed by or being considered for employment by vendor's company.
4. No JEA officer or employee work as a consultant or has a contractual relationship with vendor's company.
5. No JEA officer or employee will derive a personal financial gain or loss from this contract.
6. No relative of a JEA officer or employee will derive a personal financial gain or loss from this contract. (Relatives include a father, mother, son, daughter, husband, wife, brother, sister, father-in-law, mother-in-law, son-in-law, or daughter-in-law.)

If a vendor has one or more relationships with a JEA officer or employee or a relative of a JEA officer or employee that meets the criteria described above, then the vendor shall disclose the information by completing the Conflict of Interest Form on the following page.

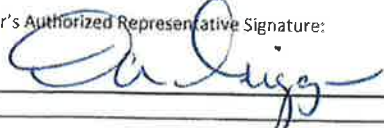
1411877848 Appendix B - Bid Forms
(IFB) Electrical General Contractor Services



CONFLICT OF INTEREST DISCLOSURE FORM

Disclosing a potential conflict of interest does not disqualify vendors. In the event vendors do not disclose potential conflicts of interest, and they are detected by JEA, vendor may be **disqualified** from doing business with JEA.

Questions about this form? Contact (JEA, Buyer)

IFA Bid/Solicitation/Contract Number: 1411877848	Name of JEA Employee(s) Working on Vendor's Current Contract(s) with JEA:	
Vendor Name: Cogburn Bros., Inc.	Vendor Phone: 904 358 7344	
Vendor's Authorized Representative Name and Title: Damon Driggers, Sr. Project Manager	Authorized Representative's Phone: 904 358 7344	
NAME(S) OF JEA EMPLOYEE(S) / PUBLIC OFFICER(S) WITH POTENTIAL CONFLICT OF INTEREST		
Name of JEA public officer(s), employee(s), or relatives with whom there may be a potential conflict of interest. If more than five, attach a second form.	Relationship of JEA public officer(s)/employee(s) and/or relative(s) to vendor's company from list above (e.g. 1(a), 2, etc.). Please list all that apply:	
1.		
2.		
3.		
4.		
5.		
<input checked="" type="checkbox"/> Vendor has no conflict of interest to report. <input type="checkbox"/> Vendor hereby declares it has not and will not provide gifts or hospitality of any dollar value or any other gratuities to any JEA officer or employee to obtain or maintain a contract. <input type="checkbox"/> I certify that this Conflict of Interest Disclosure has been examined by me and that its contents are true and correct to my knowledge and belief and I have the authority to so certify on behalf of the Vendor.		
Vendor's Authorized Representative Signature: 	Date: 01/07/2024	

Award #3 Supporting Documents 03-27-2025

1411877848 Appendix B - Bid Forms
(IFB) Electrical General Contractor Services

FOR JEA USE ONLY IF CONFLICT NOTED

This form has been reviewed by:

Name of JEA Ethics Officer:	Signature:	Date:
Note:		

Electrical GC Services and Support - Bid Workbook			
LABOR RATES			
LABOR CLASSIFICATION	FIVE YEAR FORECAST (HRS)	RATE	Extended Total
Laborer	1,000.00	\$ 50.00	50,000.00
Journeyman Electrician Apprentice	1,000.00	\$ 65.00	195,000.00
Journeyman Electrician (Industrial)	12,000.00	\$ 105.00	1,260,000.00
Journeyman Electrician (Foreman)	3,000.00	\$ 115.00	345,000.00
Fiber Technician	500.00	\$ 115.00	57,500.00
U&C Technician	5,000.00	\$ 115.00	345,000.00
Notes		Subtotal	2,252,500.00
LABOR RATES - OVERTIME 1.5 X			
LABOR CLASSIFICATION	FIVE YEAR FORECAST (HRS)	RATE	Extended Total
Laborer Overtime	200.00	\$ 65.00	13,000.00
Journeyman Electrician Apprentice Overtime	600.00	\$ 85.00	51,000.00
Journeyman Electrician (Industrial) Overtime	2,400.00	\$ 135.00	324,000.00
Journeyman Electrician (Foreman) Overtime	600.00	\$ 150.00	90,000.00
Fiber Technician Overtime	100.00	\$ 150.00	15,000.00
U&C Technician Overtime	600.00	\$ 150.00	90,000.00
Notes		Subtotal	583,000.00
1. Double Time (2X) Labor rates are not permitted. JEA will only pay up to 1.5 X the straight time rate for Overtime hours.			
2. All trades shall be local; no travel or per diem will paid to trades			
EQUIPMENT RATES - DAY RATES (Equipment will only be operated by Company Personnel)			
EQUIPMENT CLASSIFICATION	FIVE YEAR FORECAST	Day Rate	Extended Total
Job Truck (1/2 ton to 1 ton)	1,000.00	\$ 160.00	160,000.00
Bucket Truck	1,000.00	\$ 362.50	362,500.00
Man-lift 30'	500.00	\$ 725.00	218,750.00
Man-lift 45'	250.00	\$ 875.00	195,000.00
Man-lift 60'	200.00	\$ 975.00	72,500.00
Rough Terrain Man-lift 30'	100.00	\$ 875.00	70,000.00
Rough Terrain Man-lift 45'	80.00	\$ 975.00	58,500.00
Rough Terrain Man-lift 60'	60.00	\$ 1,000.00	27,500.00
Scissor Lift 20'	400.00	\$ 575.00	230,000.00
Back hoe - 0.5 CY	200.00	\$ 900.00	180,000.00
Notes		Subtotal	1,574,750.00
EQUIPMENT RATES - WEEK RATES (Equipment will only be operated by Company Personnel)			
EQUIPMENT CLASSIFICATION	FIVE YEAR FORECAST	Week Rate	Extended Total
Job Truck (1/2 ton to 1 ton)	20.00	\$ 800.00	16,000.00
Bucket Truck	80.00	\$ -	-
Man-lift 30'	40.00	\$ 1,600.00	64,000.00
Man-lift 45'	30.00	\$ 1,850.00	55,500.00
Man-lift 60'	10.00	\$ 2,275.00	22,750.00
Rough Terrain Man-lift 30'	20.00	\$ 1,600.00	32,000.00
Rough Terrain Man-lift 45'	15.00	\$ 1,850.00	27,750.00
Rough Terrain Man-lift 60'	10.00	\$ 2,275.00	22,750.00
Scissor Lift 20'	80.00	\$ 550.00	44,000.00
Back hoe - 0.5 CY	60.00	\$ 1,675.00	100,500.00
Back hoe - 1 CY	40.00	\$ 1,900.00	76,000.00
Notes		Subtotal	461,250.00
1. Double Time (2X) Labor rates are not permitted. JEA will only pay up to 1.5 X the straight time rate for Overtime hours.			
MATERIALS MARKUP			
DESCRIPTION	Materials Estimate	PERCENT (NTE 10%)	
Materials Markup - not to exceed 10%. For materials purchased, the Company shall provide the original invoice (Company Cost) for the materials purchased by the company, apply the mark up percentage, and show Company's final Price to JEA.	250,000.00	10%	\$ 275,000.00
RENTAL MARKUP			
DESCRIPTION	Rental Forecast	PERCENT (NTE 10%)	
Rental Equipment Markup - not to exceed 10% - For specific work identified after contract execution, where JEA requires the Contractor to perform and the Contractor does not have the equipment in-house.	50,000.00	10%	\$ 55,000.00
SUBCONTRACTOR MARKUP			
DESCRIPTION	Subcontractor Forecast	PERCENT (NTE 10%)	
Subcontractor Markup - not to exceed 10% - For specific work identified after contract execution, where JEA requires the Contractor to perform and the Contractor does not have the resources in-house.	50,000.00	10%	\$ 55,000.00
Bid Subtotal			\$ 5,286,800.00
Home Office Overhead / Overhead Mark up		15%	\$ 788,475.00
Profit Margin		5%	\$ 302,248.75
SWA (MOT, Permitting, etc)			\$ 100,000.00
Total Bid Price			\$ 6,447,223.75



STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

ELECTRICAL CONTRACTORS' LICENSING BOARD

THE ELECTRICAL CONTRACTOR HEREIN IS CERTIFIED UNDER THE
PROVISIONS OF CHAPTER 489, FLORIDA STATUTES

COGBURN, LARRY DAVID

COGBURN BROS, INC.
3300 FAYE ROAD
JACKSONVILLE FL 32226

LICENSE NUMBER: EC0000457

EXPIRATION DATE: AUGUST 31, 2026

Always verify licenses online at MyFloridaLicense.com

ISSUED: 08/01/2024

Do not alter this document in any form.

This is your license. It is unlawful for anyone other than the licensee to use this document.



Electrical GC Services and Support - Bid Workbook					
LABOR RATES		PREMIER		COGBURN	
LABOR CLASSIFICATION	FIVE YEAR FORECAST (HRS)	RATE	Extended Total	RATE	Extended Total
Laborer	1,000.00	\$ 40.00	40,000.00	\$ 50.00	50,000.00
Journeyman Electrician Apprentice	3,000.00	\$ 50.00	150,000.00	\$ 65.00	195,000.00
Journeyman Electrician (Industrial)	12,000.00	\$ 65.00	780,000.00	\$ 105.00	1,260,000.00
Journeyman Electrician (Foreman)	3,000.00	\$ 75.00	225,000.00	\$ 115.00	345,000.00
Fiber Technician	500.00	\$ 65.00	32,500.00	\$ 115.00	57,500.00
IdC Technician	3,000.00	\$ 85.00	255,000.00	\$ 115.00	345,000.00
Notes		Subtotal	1,482,500.00	Subtotal	2,252,500.00
LABOR RATES - OVERTIME 1.5 X					
LABOR CLASSIFICATION	FIVE YEAR FORECAST (HRS)	RATE	Extended Total	RATE	Extended Total
Laborer Overtime	200.00	\$ 60.00	12,000.00	\$ 65.00	13,000.00
Journeyman Electrician Apprentice Overtime	600.00	\$ 75.00	45,000.00	\$ 85.00	51,000.00
Journeyman Electrician (Industrial) Overtime	2,400.00	\$ 97.50	234,000.00	\$ 135.00	324,000.00
Journeyman Electrician (Foreman) Overtime	600.00	\$ 112.50	67,500.00	\$ 150.00	90,000.00
Fiber Technician Overtime	100.00	\$ 97.50	9,750.00	\$ 150.00	15,000.00
IdC Technician Overtime	600.00	\$ 127.50	76,500.00	\$ 150.00	90,000.00
Notes		Subtotal	444,750.00	Subtotal	583,000.00
1 - Double Time (2X) Labor rates are not permitted. JEA will only pay up to 1.5 X the straight time rate for Overtime hours. 2 - All trades shall be local; no travel or per diem will paid to trades					
EQUIPMENT RATES - DAY RATES (Equipment will only be operated by Company Personnel)					
EQUIPMENT CLASSIFICATION	FIVE YEAR FORECAST	Day Rate	Extended Total	Day Rate	Extended Total
Job Truck (1/2 ton to 1 ton)	1,000.00	\$ 240.00	240,000.00	\$ 160.00	160,000.00
Bucket Truck	1,000.00	\$ 750.00	750,000.00	\$ -	-
Man-lift 30'	500.00	\$ 400.00	200,000.00	\$ 725.00	362,500.00
Man-lift 45'	250.00	\$ 450.00	112,500.00	\$ 875.00	218,750.00
Man-lift 60'	200.00	\$ 950.00	190,000.00	\$ 975.00	195,000.00
Rough Terrain Man-lift 30'	100.00	\$ 500.00	50,000.00	\$ 725.00	72,500.00
Rough Terrain Man-lift 45'	80.00	\$ 650.00	52,000.00	\$ 875.00	70,000.00
Rough Terrain Man-lift 60'	60.00	\$ 1,250.00	75,000.00	\$ 975.00	58,500.00
Scissor Lift 20'	100.00	\$ 250.00	25,000.00	\$ 275.00	27,500.00
Back hoe - 0.5 CY	400.00	\$ 400.00	160,000.00	\$ 575.00	230,000.00
Back hoe - 1 CY	200.00	\$ 600.00	120,000.00	\$ 900.00	180,000.00
Notes		Subtotal	1,974,500.00	Subtotal	1,874,750.00
EQUIPMENT RATES - WEEK RATES (Equipment will only be operated by Company Personnel)					
EQUIPMENT CLASSIFICATION	FIVE YEAR FORECAST	Week Rate	Extended Total	Week Rate	Extended Total
Job Truck (1/2 ton to 1 ton)	20.00	\$ 1,050.00	21,000.00	\$ 800.00	16,000.00
Bucket Truck	80.00	\$ 3,500.00	280,000.00	\$ -	-
Man-lift 30'	40.00	\$ 1,900.00	76,000.00	\$ 1,600.00	64,000.00
Man-lift 45'	30.00	\$ 2,100.00	63,000.00	\$ 1,850.00	55,500.00
Man-lift 60'	10.00	\$ 3,500.00	35,000.00	\$ 2,275.00	22,750.00
Rough Terrain Man-lift 30'	20.00	\$ 2,600.00	52,000.00	\$ 1,600.00	32,000.00
Rough Terrain Man-lift 45'	15.00	\$ 3,200.00	48,000.00	\$ 1,850.00	27,750.00
Rough Terrain Man-lift 60'	10.00	\$ 4,325.00	43,250.00	\$ 2,275.00	22,750.00
Scissor Lift 20'	80.00	\$ 1,100.00	88,000.00	\$ 550.00	44,000.00
Back hoe - 0.5 CY	60.00	\$ 1,700.00	102,000.00	\$ 1,675.00	100,500.00
Back hoe - 1 CY	40.00	\$ 2,500.00	100,000.00	\$ 1,900.00	76,000.00
Notes		Subtotal	908,250.00	Subtotal	461,250.00
1 - Double Time (2X) Labor rates are not permitted. JEA will only pay up to 1.5 X the straight time rate for Overtime hours.					
MATERIALS MARKUP					
DESCRIPTION	Materials Estimate	PERCENT (NTE 10%)		PERCENT (NTE 10%)	
Materials Markup - not to exceed 10%. For materials purchased, the Company shall provide the original invoice (Company Cost) for the materials purchased by the company, apply the mark up percentage, and show Company's final Price to JEA.	250,000.00	10%	\$ 275,000.00	10%	\$ 275,000.00
RENTAL MARKUP					
DESCRIPTION	Rental Forecast	PERCENT (NTE 10%)		PERCENT (NTE 10%)	
Rental Equipment Markup - not to exceed 10% - For specific work identified after contract execution, where JEA requires the Contractor to perform and the Contractor does not have the equipment in-house.	50,000.00	10%	\$ 55,000.00	10%	\$ 55,000.00
SUBCONTRACTOR MARKUP					
DESCRIPTION	Rental Forecast	PERCENT (NTE 10%)		PERCENT (NTE 10%)	
Rental Equipment Markup - not to exceed 10% - For specific work identified after contract execution, where JEA requires the Contractor to perform and the Contractor does not have the material in-house.	50,000.00	10%	\$ 55,000.00	10%	\$ 55,000.00
Bid Subtotal			\$ 5,195,000.00		\$ 5,256,500.00
Home Office Overhead / Overhead Mark up		8%	\$ 415,600.00	15%	\$ 788,475.00
Profit Margin		10%	\$ 561,060.00	5%	\$ 302,248.75
SWA (MOT, Permitting, etc)			\$ 100,000.00		\$ 100,000.00
Total Bid Price			\$ 6,271,660.00		\$ 6,447,223.75

Average	\$ 6,359,441.88
1-Yr	\$ 1,271,888.38
Split	\$ 635,944.19

Award #4 Supporting Documents 03-27-2025

From: [Behr, Jason V.](#)
To: ddefee@mecojax.com; wivey@mecojax.com; RTHOMAS@MECOJAX.COM; ddriggers@cogburnbros.com; henry.carpenter@zabatt.com
Cc: [Pearson, Kenny R](#); [Besic, Sadmir](#); [Baldwin, David M.](#)
Subject: 1411921050 (IFB) BGS Standby Emergency Diesel Generator Integration - Intent to Award
Date: Tuesday, March 18, 2025 11:25:40 AM
Attachments: [image001.png](#)

Good Morning,

This communication is to inform you of JEA's intent to award for Solicitation **1411921050 (IFB) BGS Standby Emergency Diesel Generator Integration.** JEA has reviewed all the submittals and has determined **Miller Electric Company** is the Responsive and Responsible Bidder whose Bid meets or exceeds the Minimum Qualifications set forth in this Solicitation, and is the Lowest Priced Bidder for the services which they are being awarded.

Company Name	Rank	Total Bid Amount
Miller Electric Company	1	\$987,184.32
Cogburn Bros Inc	2	\$1,499,700.00
Zabatt Power Systems	3	\$1,997,949.20

Administrative Remedies are located on JEA.com. JEA appreciates your participation and looks forward to future opportunities to work with your company.

Thank you,
Jason Behr
Senior Purchasing Agent
Direct: (904) 226-0689



Award #4 Supporting Documents 03-27-2025

1411921050 (IFB) BGS Standby Emergency Diesel Generator Integration - Appendix B - Bid Forms

Submit the Response an electronic pdf in accordance with the procedures in the solicitation

Company Name: Miller Electric CompanyCompany's Address: 6805 South Point PKWY Jacksonville, Florida 32216License Number: EC13003061 & Duval Liscense #82899Phone Number: 904.388.8000 FAX No: 904.389.8653 Email Address: rthomas@mecojax.com**BID SECURITY REQUIREMENTS**

- ☒ None required
☐ Certified Check or Bond Five Percent (5%)

TERM OF CONTRACT

- ☐ One Time Purchase
☐ Term - N/A
☒ Other, Specify - Project Completion

SAMPLE REQUIREMENTS

- ☒ None required
☐ Samples required prior to Bid Opening
☐ Samples may be required subsequent to Bid Opening

SECTION 255.05, FLORIDA STATUTES CONTRACT BOND

- ☐ None required
☒ Bond required 100% of Bid Award

QUANTITIES

- ☐ Quantities indicated are exacting
☒ Quantities indicated reflect the approximate quantities to be purchased Throughout the Contract period and are subject to fluctuation in accordance with actual requirements.

INSURANCE REQUIREMENTS**Insurance required****PAYMENT DISCOUNTS**

- ☐ 1% 20, net 30
☐ 2% 10, net 30
☐ Other _____
☒ None Offered

Item No.	ENTER YOUR BID FOR THE FOLLOWING DESCRIBED ARTICLES OR SERVICES:	TOTAL BID PRICE
3	Total Bid Price	\$ <u>987,184.32</u>

☒ I have read and understood the Sunshine Law/Public Records clauses contained within this solicitation. I understand that in the absence of a redacted copy my proposal will be disclosed to the public "as-is".

BIDDER CERTIFICATION

By submitting this Bid, the Bidder certifies that it has read and reviewed all of the documents pertaining to this Solicitation, that the person signing below is an authorized representative of the Bidding Company, that the Company is legally authorized to do business in the State of Florida, and that the Company maintains in active status an appropriate contractor's license for the work (if applicable). The Bidder also certifies that it complies with all sections (including but not limited to Conflict Of Interest and Ethics) of this Solicitation.

We have received addenda

1 through 5
Handwritten Signature of Authorized Officer of Company or AgentFebruary 25, 2025

Date

Pat Eliason, Group President
Printed Name and Title

Award #4 Supporting Documents 03-27-2025

1411921050 (IFB) BGS Standby Emergency Diesel Generator Integration - Appendix B - Bid Forms

LIST OF SUBCONTRACTORS

JEA Solicitation Number 1411921050 requires certain major Subcontractors be listed on this form, unless the work will be self-performed by the Company.

The undersigned understands that failure to submit the required Subcontractor information on this form will result in bid rejection, and the Company agrees to employ the Subcontractors specified below: (Use additional sheets as necessary)

Note: This list of Subcontractors shall not be modified subsequent to bid opening, without a showing of good cause and the written consent of JEA.

Type of Work	Corporate Name of Subcontractor	Subcontractor Primary Contact Person & Telephone Number	Subcontractor's License Number (if applicable)	Percentage of Work or Dollar Amount
--------------	---------------------------------	---	--	-------------------------------------

Concrete pad & Manual OH Door Installation	W.W.GAY Mechanical Inc.	Keith Foster 904.445.9651 kfoster@wwgmc.com		3.2%
--	-------------------------	--	--	------

Signed: 
Pat Eliason, Group President

Company: Miller Electric Company

Address: 6805 South Point Pkwy

Date: February 25, 2025


Award #4 Supporting Documents 03-27-2025

1411921050 (IFB) BGS Standby Emergency Diesel Generator Integration - Appendix B - Bid Forms

LIST OF JSEB SUBCONTRACTORS

The following JSEB Subcontractors will be utilized in fulfilling the terms and conditions of a Project Authorization arising from award of JEA - N/A. I (We) the undersigned understand that failure to submit said information will result in bid rejection. I (We) will employ the JSEB Subcontractors specified below: (Use additional sheets as necessary)

Class of Work (Category)	Name of JSEB Contractor (Indicate below)	Percentage of Total Job or
Dollar Amount \$0.00		0%

Signed: 
Pat Eliason, Group President
Company: Miller Electric Company
Address: 6805 South Point Pkwy
Date: February 25, 2025

Note: This list shall not be modified subsequent to bid opening without a showing of good cause and the written consent of the JEA.

THE MINIMUM QUALIFICATIONS SHALL BE SUBMITTED ON THIS FORM. IN ORDER TO BE CONSIDERED A QUALIFIED BIDDER BY JEA YOU MUST MEET THE MINIMUM QUALIFICATIONS LISTED BELOW, AND BE ABLE TO PROVIDE ALL THE SERVICES LISTED IN THIS SOLICITATION.

THE BIDDER MUST COMPLETE THE BIDDER INFORMATION SECTION BELOW AND PROVIDE ANY OTHER INFORMATION OR REFERENCE REQUESTED. THE BIDDER MUST ALSO PROVIDE ANY ATTACHMENTS REQUESTED WITH THIS MINIMUM QUALIFICATIONS FORM.

BIDDER INFORMATION

COMPANY NAME: Miller Electric Company

BUSINESS ADDRESS: 6805 South Point Pkwy

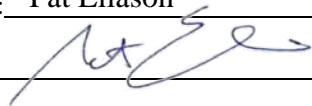
CITY, STATE, ZIP CODE: Jacksonville Florida 32216

TELEPHONE: 904.388.8000

FAX: 904.389.8653

E-MAIL: peliason@mecojax.com

PRINT NAME OF AUTHORIZED REPRESENTATIVE: Pat Eliason

SIGNATURE OF AUTHORIZED REPRESENTATIVE: 

NAME AND TITLE OF AUTHORIZED REPRESENTATIVE: Pat Eliason Group President

MINIMUM QUALIFICATIONS:

Respondent must meet the following Minimum Qualifications to be considered eligible to have its Response evaluated by JEA. Respondent must complete and submit the Minimum Qualification Form provided in this Solicitation. Respondents that are working or have worked for JEA in the past 2 years involving similar work must submit JEA as a reference. JEA reserves the right to ask for additional back up documentation or additional reference projects to confirm the Respondent meets the requirements stated above.

JEA may reject Responses from Respondents not meeting all of the following Minimum Qualifications:

- I. Respondent must not be on the State of Florida Convicted Vendor List, State of Florida's Suspended Vendor List, the City of Jacksonville's Disqualified Vendor List, have their bidding privileges actively suspended by JEA, been debarred by JEA, or have had a contract with JEA was terminated for default within the last two (2) years.
 - Bidder shall have successfully completed two (2) similar projects in the past eight (8) years ending January 31, 2025. A similar project is defined as the installation of transfer switches and/or switchboards that are comparable in size to the one's listed in the Technical Specifications.

Award #4 Supporting Documents 03-27-2025

1411921050 (IFB) BGS Standby Emergency Diesel Generator Integration - Appendix B - Bid Forms

PROJECT 1

Project Title WestRock Seminole Replace Low voltage Switch Gear in Power House

Reference Contact Name Erick Martinez

Reference Phone Number 904.254.6663

Reference E-Mail Address erick.martinez@smurfitwestrock.com

Contract Year/Amount	2019 - \$179,473.92
----------------------	---------------------

Address of Work 9469 Eastport Rd Jacksonville Florida

Description of Project Installation of 15kv LIS, relocate 15kv transformer, install new 2000 amp secondary switchgear and feeder cabling.

Award #4 Supporting Documents 03-27-2025

1411921050 (IFB) BGS Standby Emergency Diesel Generator Integration - Appendix B - Bid Forms

PROJECT 2

Project Title WestRock Fernandina PM4 Fan Pump Drive

Reference Contact Name Gary Milstead

Reference Phone Number 904.994.8992

Reference E-Mail Address gary.milstead@smurfitwestrock.com

Contract Year/Amount	2023 - \$406,960.02
----------------------	---------------------

Address of Work 600N 8th Street Fernandina Beach Florida 32034

Description of Project _____

Installation of 15kv LIS, 2500 kva transformer, 3000 amp A/C drive switchgear and cabling.



VENDOR CONFLICT OF INTEREST DISCLOSURE FORM INSTRUCTIONS

Vendors shall not try to gain an unfair competitive advantage or influence the ability of JEA officers and employees to make impartial and objective decisions on behalf of JEA.

All vendors interested in conducting business with JEA must complete and return the Vendor Conflict of Interest Disclosure Form found on the following page in order to be eligible to be awarded a contract with JEA. Please note that all vendors are subject to comply with JEA's conflict of interest policies provided below.

1. No JEA officer (e.g., JEA Board member and elected City official) or employee has an ownership interest of more than 5% in vendor's company.
2. No JEA officer or employee is an officer, director, partner or proprietor of vendor's company.
3. No JEA officer or employee is employed by or being considered for employment by vendor's company.
4. No JEA officer or employee work as a consultant or has a contractual relationship with vendor's company.
5. No JEA officer or employee will derive a personal financial gain or loss from this contract.
6. No relative of a JEA officer or employee will derive a personal financial gain or loss from this contract. (Relatives include a father, mother, son, daughter, husband, wife, brother, sister, father-in-law, mother-in-law, son-in-law, or daughter-in-law.)

If a vendor has one or more relationships with a JEA officer or employee or a relative of a JEA officer or employee that meets the criteria described above, then the vendor shall disclose the information by completing the Conflict of Interest Form on the following page.



CONFLICT OF INTEREST DISCLOSURE FORM

*Disclosing a potential conflict of interest does not disqualify vendors. In the event vendors do not disclose potential conflicts of interest, and they are detected by JEA, vendor may be **disqualified** from doing business with JEA.*

Questions about this form? Contact (JEA, Buyer)

JEA Bid/Solicitation/Contract Number:	Name of JEA Employee(s) Working on Vendor's Current Contract(s) with JEA:	
Vendor Name:		Vendor Phone:
Vendor's Authorized Representative Name and Title:		Authorized Representative's Phone:
NAME(S) OF JEA EMPLOYEE(S) / PUBLIC OFFICER(S) WITH POTENTIAL CONFLICT OF INTEREST		
Name of JEA public officer(s), employee(s), or relatives with whom there may be a potential conflict of interest. If more than five, attach a second form.		Relationship of JEA public officer(s)/employee(s) and/or relative(s) to vendor's company from list above (e.g. 1(a), 2, etc.). Please list all that apply:
1.		
2.		
3.		
4.		
5.		
<input checked="" type="checkbox"/> Vendor has no conflict of interest to report. <input type="checkbox"/> Vendor hereby declares it has not and will not provide gifts or hospitality of any dollar value or any other gratuities to any JEA officer or employee to obtain or maintain a contract. <input type="checkbox"/> I certify that this Conflict of Interest Disclosure has been examined by me and that its contents are true and correct to my knowledge and belief and I have the authority to so certify on behalf of the Vendor.		
Vendor's Authorized Representative Signature:		Date:
<hr/>		

Award #4 Supporting Documents 03-27-2025

1411921050 (IFB) BGS Standby Emergency Diesel Generator Integration - Appendix B - Bid Forms

FOR JEA USE ONLY IF CONFLICT NOTED

This form has been reviewed by:

Name of JEA Ethics Officer:	Signature:	Date:
Note:		



February 25, 2025

JEA
Brandy Branch Generating Station
15701 W. Beaver Street
Baldwin, Florida 32234

Re: BGS Standby Emergency Diesel Generator Integration-Solicitation #1411921050

JEA Procurement,

We are pleased to submit our proposal to furnish labor, materials, tools and supervision for the electrical installation on the above referenced project as per our site visit and the information provided.

Our price includes and is based on the following:

Inclusions:

1. Provide labor and materials to install one (1) owner provided, 2000A, 480V switchboard consisting of four (4) sections in the Shared Services Building.
2. Provide labor and materials to install one (1) owner provided, 600A, 480V ATS in the Shared Services Building.
3. Provide labor and materials to install one (1) owner provided, 600A, 480V ATS on the east side of the unit 1 Control/Electrical building.
4. Provide labor and materials to install one (1) owner provided, 600A, 480V ATS on the east side of the unit 2 Control/Electrical building.
5. Provide labor and materials to install one (1) owner provided, 600A, 480V ATS on the east side of the unit 3 Control/Electrical building.
6. Provide labor and materials to install one (1) owner provided, 800A, 480V ATS on the east side of the unit 4 Control/Electrical building.
7. Provide labor and materials to install GRS conduit as per the 5.3. Conduit Schedule in the Technical Specifications, Project: 8008367, Revision 3, Date: 01/23/25.
8. Provide labor and materials to install the six (6) sets of existing feeders from the overhead cable tray to the new 2000A switchgear as per 3.5. Generator Feeder Cable Terminations in the Technical Specifications, Project: 8008367, Revision 3, Date: 01/23/25.
9. Provide labor and materials to install the Emergency Feeder Cables as per 3.6. ATS "Emergency" Feeder Cable Pulls and Terminations and 5.4. Feeder Cable Specifications in the Technical Specifications, Project: 8008367, Revision 3, Date: 01/23/25.



10. Provide labor and materials to install and demo feeders as per 3.7. ATS "Normal" and "Load" Feeder Cable Removal, Pulls, and Terminations and 5.4. Feeder Cable Specifications in the Technical Specifications, Project: 8008367, Revision 3, Date: 01/23/25.
11. Provide labor and materials to install control cables as per 3.8. Control Wire Pulls and Terminations and 5.5. Control Cable Specifications in the Technical Specifications, Project: 8008367, Revision 3, Date: 01/23/25.
12. Provide the services of a General/Mechanical contractor to install one (1) 8' X 10' manual roll up door in the west wall of the shared services building including a concrete entry path 8' X 14.5' X 6" as per addendum 2.
13. Provide the services of a General/Mechanical contractor to install four (4) concrete ATS pads as per 3.2. ATS Padding and 5.2. ATS Concrete Specification in the Technical Specifications, Project: 8008367, Revision 3, Date: 01/23/25.
14. Provide labor and materials to install cable labeling as per 3.9. Cable Labelling in the Technical Specifications, Project: 8008367, Revision 3, Date: 01/23/25.
15. Provide labor for CSU assistance as per addendum 3.
16. Equipment.
17. Bond.
18. LOTO as per JEA.

Clarifications:

1. All work shall take place during our normal working hours Monday through Thursday 7:00am-5:30pm.
2. All work shall be performed in strict accordance with NFPA 70E, Miller Electric Safety Policy, OSHA 29CFR1910.333 and OSHA 29CFR1926.416.
3. No equipment pads are included for the ATS and the switchgear in the Shared Services Building.
4. No conduit fittings included for the manholes as the Typical Duct Bank Termination Detail shows standard end bells on drawing 60903-CMA-S3322, Revision 3.
5. No cable racks for the manholes included.
6. Due to the volatile pricing of certain types of materials and eliminating unnecessary contingencies, we have based our proposal on today's pricing levels. Upon award of contract, material pricing will be re-evaluated, and any necessary adjustments will be applied.
7. The quoted price set forth herein does not include the cost impact of any tariffs or other taxes or embargoes which may be imposed by the United States or any of its trading partners. To the extent the cost of any materials/equipment/items procured in furtherance of a subcontract or purchase order based upon this quotation/proposal is impacted by the imposition of any tariffs, tax or embargo, the actual documented cost of such shall be billed to, and reimbursed by, USG, along with any schedule adjustments necessitated thereby.



MILLER ELECTRIC COMPANY
Powering the Possibilities

PO Box 1799 (32201)
6805 Southpoint Parkway
Jacksonville, FL 32216
TOLL FREE: 800.554.4761
FAX: 904.389.8653
www.mecojax.com

Our Lump Sum Price is in the amount of.....\$987,184.32

Labor.....	\$371,283.72
Material.....	\$534,963.34
Equipment.....	\$36,241.26
Subcontract.....	\$37,284.00
Bond.....	\$7,412.00

We appreciate the opportunity to submit our proposal and look forward to working with you on this and any other projects you may have in the future.

Thank you,

MILLER ELECTRIC COMPANY

Daniel DeFee, Assistant Project Manager

Award #5 Supporting Documents 03-27-2025

JEA Planner	Warehouse	JEA Item ID	Item Description	UOM	Min	Max	Usage Over Bid Term	Monthly Net Issue Quantity	Monthly Gross Issue Quantity	Unit Price	To Awards funds Increase	Note
Mike	CSC Stores	SWERC002	CONTROL, TO BE USED WITH RADIO-CONTROLLED SWITCH (SWERC001). INCLUDES CONTROL CABINET, 40' CONTROL CABLE, MOUNTING CHANNEL, TWO KNOCKOUTS FOR 1" FLEX 90. COAXIAL POLYPHASOR, LOCKING SLEEVE FOR CONTROL CABLE AND COAXIAL. PURCHASE AS A SET.	Each	32	48	45	3	3		\$11,800	3/21/25 reduced qty from forecasted 64 to 45 units per email confirmation Planning

Applied filters:NumberOfMonths is 22Usage Calculation is Net UsagePurchase Order Number is 219446



Pricing Proposal
 Quotation #: 25636264
 Created On: 12/12/2024
 Valid Until: 4/15/2025

JEA

Bryan Wagoner

301 W. Bay St
 Suite 2600
 Jacksonville, FL 32202
 United States
 Phone: (904) 360-1345
 Fax:
 Email: wagonerb@jea.com

Field Account Manager

Ryan Frey

290 Davidson Ave.
 Somerset, NJ 08873
 Phone: 800-477-6479
 Fax: 732-564-8553
 Email: Ryan_Frey@shi.com

All Prices are in US Dollar (USD)

	Product	Qty	Your Price	Total
1	Dragos SiteStore model STS-500-E DRAGOS, INC. - Part#: STS-500-E Contract Name: Sourcewell- Technology Products & Solutions Contract #: 121923-SHI	2	\$34,669.80	\$69,339.60
2	Dragos SiteStore subscription license, STS-500 DRAGOS, INC. - Part#: STS-500-SW Contract Name: Sourcewell- Technology Products & Solutions Contract #: 121923-SHI Note: 12 Month Term	2	\$8,667.45	\$17,334.90
3	Dragos Sensor model NS-1000-E DRAGOS, INC. - Part#: NS-1000-E Contract Name: Sourcewell- Technology Products & Solutions Contract #: 121923-SHI	6	\$12,567.81	\$75,406.86
4	Dragos Sensor subscription license, 1 Gbps DRAGOS, INC. - Part#: NPN-DRAGO- SEN-B Contract Name: Sourcewell- Technology Products & Solutions Contract #: 121923-SHI Note: 12 Month Term	6	\$17,334.90	\$104,009.40
5	OT Watch Premium for 1000mbps sensor license DRAGOS, INC. - Part#: NPN-DRAGO-OTWAT-1000 Contract Name: Sourcewell- Technology Products & Solutions Contract #: 121923-SHI Note: 12 Month Term	6	\$11,267.69	\$67,606.14
6	Service - Remote Deployment & Installation Costs Up to 6 Sensors DRAGOS, INC. - Part#: NPN-DRAGOS-RMTDP Contract Name: Sourcewell- Technology Products & Solutions Contract #: 121923-SHI	1	\$9,151.45	\$9,151.45
			Total	\$342,848.35

Thank you for choosing SHI International Corp! The pricing offered on this quote proposal is valid through the expiration date listed above. To ensure the best level of service, please provide End User Name, Phone Number, Email Address and applicable Contract Number when submitting a Purchase Order. For any additional information including Hardware, Software and Services Contracts, please contact an SHI Inside Sales Representative at (888) 744-4084. SHI International Corp. is 100% Minority Owned, Woman Owned Business. TAX ID# 22-3009648; DUNS# 61-1429481; CCR# 61-243957G; CAGE 1HTF0

Hardware items on this quote may be updated to reflect changes due to industry wide constraints and fluctuations.

The products offered under this proposal are resold in accordance with the terms and conditions of the Contract referenced under that applicable line item.

PROJECT MANAGEMENT PLAN

Enhanced Grid Cybersecurity Threat and Vulnerability Management

WORK PERFORMED UNDER AGREEMENT

DE-CR0000034

JEA

(Formerly known as *Jacksonville Electric Authority*)

225 N Pearl Street

Jacksonville, FL 32202

Period of Performance: 09/01/2024 to 09/30/2025

Current Budget Period: 10/01/2024 to 09/30/2025

Submitted: 11/19/2024

Revision: #3

PRINCIPAL INVESTIGATOR

Stephen Datz

(904) 665-8872

datzsh@jea.com

BUSINESS CONTACT

Janie K. Smalley

(904) 665-4147

smaljk@jea.com

SUBMITTED TO

U. S. Department of Energy

National Energy Technology Laboratory

DOE Project Officer: Brian J. Hetzer

This report should not contain any proprietary, business sensitive, or other information not subject to public release.

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ACRONYM LIST

DMP:	Data Management Plan
DOE:	Department of Energy
FOA:	Funding Opportunity Announcement
FY:	Fiscal Year (Federal)
PMP:	Project Management Plan
Q#:	Quarter #
SOPO:	Statement of Project Objectives
NDR:	Network Detection and Response
JEA: (Grantee)	Community-owned utility, formerly Jacksonville Electrical Authority

TECHNICAL ACRONYMS

CMDB:	Configuration Management Database
IT:	Information Technology (focus on managing digital processes & data)
OT:	Operational Technology (focus on physical processes & equipment)
SCADA:	Supervisory Control and Data Acquisition (Hardware Control Systems)
SIEM:	Security Information and Event Management
Splunk:	SIEM Software platform

COMMERCIAL PRODUCTS

Service Now:	JEA's existing IT Service Management Platform
SecOps VR:	Vulnerability Response is an optional module from ServiceNow
Splunk:	JEA's SIEM Software platform
Tenable SC:	Tenable's Nessus scanning product feeds into the Security Center (SC)
Dragos:	Industrial Cybersecurity Vendor/Platform, focus on Operational Tech

Add project specific acronyms as needed.

EXECUTIVE SUMMARY AND TECHNICAL APPROACH

Background: JEA (formerly Jacksonville Electrical Authority) is the largest community-owned electric utility in Florida, serving more than one million Northeast Florida residents with electric, water, wastewater, and reclaimed water services. The five-county service area is home to critical defense, commerce, and health care infrastructure, including Naval Air Station Jacksonville, Naval Station Mayport, Naval Aviation Depot Jacksonville, Marine Corps Support Facility Blount Island, the Port of Jacksonville, and the Mayo Clinic. JEA is committed to the protection of the electric and water services that residential, institutional, and business customers depend on daily.

Purpose: The JEA information security program conducts risk assessments, vulnerability management, system monitoring, and active incident response exercises to prepare for cyber-attacks. However, improving the cybersecurity posture of JEA requires not only highly skilled cybersecurity personnel but also the latest technology and software to address continuously evolving threats and new vulnerabilities.

Scope: The project will enhance utility cybersecurity threat and vulnerability management systems as a requisite component of increasing the security posture of both Operational Technology (OT) and Information Technology (IT) systems. As critical business systems, OT systems provide the operational foundation, or control systems, for maintaining and delivering the vital lifeline utilities of energy, water, and wastewater. IT systems are the essential business systems that link customers to services. IT systems are often targeted by threat actors to gain access to OT networks.

The project will combine these systems with a configuration management database and help desk ticketing system to allow enhanced security orchestration and automation response to reduce the vulnerability lifecycle. This will provide greater visibility into network communication traffic to elevate security posture, current threat landscape, and mitigation cadence. This comprehensive project scope is intended to preserve the confidentiality, integrity, and availability of life-sustaining utilities to the region through expanded Network Detection and Response (NDR) systems that provide greater threat visibility.

Approach: The defense-in-depth approach enhances cybersecurity threat and vulnerability management for both IT and OT systems by:

1. Increasing and expanding current vulnerability scanning capabilities by including additional network scanners for IT and OT networks. New agent-based scanners will be deployed for the Demilitarized Zone (DMZ), IT, and OT servers.
2. Deploying NDR solutions for the highest risk OT areas to gain visibility at the network layer and position JEA for future compliance regulations; and,
3. Integrating vulnerability scanning and NDR solutions with the configuration management database and help desk ticketing system to automatically create mitigation tickets for subject matter experts with each system asset.

Project Stage: Commercialization

Expected Outcomes: Outcomes include on-premises vulnerability scanners for continuous integration and delivery solutions, enhanced threat monitoring capabilities for OT networks focusing on OT protocols, enterprise-wide visibility into the current threat landscape, and mitigation cadence. The outcome also provides a more secure and reliable grid with enhanced technological capacity to protect against the latest cybersecurity threats, including critical water and energy infrastructures.

Budget: The budget for this project is \$800,000.00 and will be allocated as follows:

SOPO Task 2.0 – Assess and Implement Technology Solutions for Vulnerability Scanning

The current on-premise vulnerability system is comprised of four virtual appliances and will be updated to the latest virtual appliances. This upgrade will include doubling the current storage space to facilitate forecasted growth.

The IT side will be expanded by adding two new network virtual appliance scanners and two new agent-based scanners running on the latest Windows operating system. This will provide coverage for both IT assets and DMZ assets.

The OT side will deploy new network vulnerability scanners being proposed at each site, behind a firewall. This architecture will be supplemented with agent-based scanners to provide monitoring without impacting operations.

Proposed Budget: \$90,000.00

Proposed Timeline: 32 weeks

SOPO Task 3.0 – Assess and Implement Technology Solutions for Network Detection & Response (NDR)

NDR technology will be selected and deployed for high-risk OT locations, providing network-level monitoring enabling quicker detection and response to threats. This solution may incorporate network taps and/or port spans on network assets to gain the required network-level visibility in addition to the application solution. NDR applications may be deployed as physical appliances, virtual appliances, or on operating systems. The solution should integrate with the cloud-based CMDB and ticketing systems to create tickets to the system owners based on the risk level.

Proposed Budget: \$500,000.00

Proposed Timeline: 52 weeks

SOPO Task 4.0 – Assess and Implement Technology Solutions for System Integration

Integrating the on-premise vulnerability solution to the cloud-based CMDB and ticketing system requires an integration package with customization of the data transforms. This solution will allow the vulnerabilities to be grouped by systems and prioritized based on the risk level. This will then create tickets for the owners of the systems to mitigate the vulnerabilities.

Proposed Budget: \$210,000.00

Proposed Timeline: 28 weeks

KEY PERSONNEL

List the project team's key personnel, their role, and contact information. Key personnel are identified in the Financial Assistance Agreement and, at a minimum, include the Principal Investigator and Business Point of Contact. Note that changes to key personnel require prior DOE approval.

KEY PERSONNEL			
Role	Name	Phone	Email
Principal Investigator	Stephen Datz	904-665-8872	datzsh@jea.com
Business Point of Contact	Janie K. Smalley	904-665-4147	smaljk@jea.com
Project Leader	William (Bill) Kearson	904-665-4306	kearwa@jea.com

TEAM MEMBERS

Complete the following table to provide a summary of Prime Recipient and Team Member planned activities by SOPO task and/or subtask number(s).

SUMMARY OF TEAM MEMBER PLANNED ACTIVITIES	
Team Member	Planned Activities by SOPO Task/Subtask Number(s)
Prime Recipient Stephen Datz, VP Infrastructure & Ops	Accountable for overseeing the execution of the project and final review of all deliverables.
Project Leader William Kearson, Information Security	Oversees day-to-day execution of the project (SOPO 1.0 & Subtasks)
Information Security Team (Leads TBC)	Primary resources for Requirements, Analysis and Design of systems; develops Policy and plans our procedures and response strategies. (SOPO 2.1, 3.1, 4.1 – Lead; SOPO 2.2, 3.2, 2.3, 3.3 – Partner; SOPO 4.2, 4.3 – Supporting)
Service Desk Operations Team (Leads: Russell Park, Jeremy Golden)	Owner of ServiceNow system. (SOPO 4.2, 4.3 – Lead; SOPO 4.1 – Supporting)
Network Operations Team (Leads TBC)	Defines many requirements and sets Policy as the Owner of various Infrastructure/OT systems. (SOPO 2.2, 3.2, 2.3, 3.3 – Partner; SOPO 2.1, 3.1 Supporting)
Critical Infrastructure Program (CIP) Compliance & Internal Audit	Ensure projects and systems comply with corporate policy and, where applicable, CIP regulations. (SOPO (all).3 – Supporting)
Implementation Partner: SOPO Task 3	SOPO 2.3, 3.3 Lead/Partner (TBC)
Integration Partner: SOPO Task 4	SOPO 2.3, 3.3 Lead/Partner (TBC)

SUMMARY OF TEAM MEMBER ROLES AND FUNDING			
Team Member	Role	Location	Value
JEA Head Office	Demo Host/Location	225 N Pearl Street Jacksonville, FL 32202	\$ 0
Systems Operations & Control Center	Demo Host/Location	Jacksonville, FL	\$ 0
Emergency Operations Center (Cologix)	Demo Host/Location	Jacksonville, FL	\$ 0
Tenable.SC	Vendor	6100 Merriweather Drive, 12th Fl Columbia, MD 21044	\$ 89,000

SUMMARY OF TEAM MEMBER ROLES AND FUNDING			
Team Member	Role	Location	Value
Service Now	Vendor	2225 Lawson Lane Santa Clara, CA 95054	\$ 100,500
Dragos	Vendor	1745 Dorsey Rd Suite R Hanover, MD 21076	\$450,500
Implementation Partner: SOPO Task 3	Vendor	Vendor TBD	\$50,000
Integration Partner: SOPO Task 4	Vendor	Vendor TBD	\$110,000
All JEA Internal Personnel/Team	Other	225 N Pearl Street Jacksonville, FL 32202	\$ 0

PROJECT BUDGET AND SPEND PLAN

Complete the following tables and ensure that each budget category is consistent with the SF-424A form included with the Financial Assistance Agreement.

PLANNED BUDGET			
Budget Category	Federal Share	Non-Federal Share	Total
Personnel			
Fringe Benefits			
Travel			
Equipment	\$84,850	\$84,850	\$169,700
Supplies	\$235,150	\$235,150	\$470,300
Contractual - Integration Partner: SOPO Task 3 (List each contract valued at \$25,000 or more. Add rows as necessary)	\$25,000	\$25,000	\$50,000
Contractual - Integration Partner: SOPO Task 4 (List each contract valued at \$25,000 or more. Add rows as necessary)	\$55,000	\$55,000	\$110,000
Remaining Contractual (Sum of all contracts that are individually valued at under \$25,000)			
Construction			
Other			
Sub-Total Direct Charges			
Indirect Charges			
Total	\$ 400,000	\$ 400,000	\$ 800,000

The list corresponds to the Federal Fiscal Year (FY).

QUARTERLY SPEND PLAN			
Quarter	Federal Share	Non-Federal Share	Total
FY25, Q1			
FY25, Q2	\$ 44,500	\$ 44,500	\$ 89,000
FY25, Q3	\$ 275,500	\$ 275,500	\$ 551,000
FY25, Q4	\$ 80,000	\$ 80,000	\$ 160,000
TOTAL	\$ 400,000	\$ 400,000	\$ 800,000

MILESTONE LOG

MILESTONE LOG			
Milestone or Decision Point	SOPO Task/ Subtask Number	Planned Completion Date	Verification Method or Decision Criteria
Project Management Plan (PMP)	1.1	11/15/2024	Confirmation email to Federal Project Officer
Interoperability/Cybersecurity Plan	1.2	11/30/2024	Confirmed in quarterly report
Task 2: Solutions for Vulnerability Scanning			
System Architecture Doc (SAD) approved by JEA's Design Approval Board (DAB)	2.1	12/20/2024	Confirmed in quarterly report
Procurement Completion	2.2	1/7/2025	Confirmed in quarterly report
Deployment & Configuration Complete	2.2	4/1/2025	Confirmed in quarterly report
Testing & QA Passed	2.3	4/29/2025	Confirmation email to Federal Project Officer
Warranty Period Complete, Turnover to Operations Team	2.3	5/27/2025	Confirmed in quarterly report
Task 3: Solutions for Network Detection & Response (NDR)			
System Architecture Doc (SAD) approved by JEA's Design Approval Board (DAB)	3.1	2/18/2025	Confirmed in quarterly report
Procurement Completion	3.2	4/15/2025	Confirmed in quarterly report
Deployment & Configuration Complete	3.2	8/5/2025	Confirmed in quarterly report
Testing & QA Passed	3.3	9/2/2025	Confirmation email to Federal Project Officer
Warranty Period Complete, Turnover to Operations Team	3.3	9/30/2025	Confirmed in quarterly report
Task 4: Solutions for System Integration			
System Architecture Doc (SAD) approved by JEA's Design Approval Board (DAB)	4.1	6/10/2025	Confirmed in quarterly report
Procurement Completion	4.2	7/8/2025	Confirmed in quarterly report
Deployment & Configuration Complete	4.2	8/5/2025	Confirmed in quarterly report

MILESTONE LOG			
Milestone or Decision Point	SOPO Task/ Subtask Number	Planned Completion Date	Verification Method or Decision Criteria
Testing & QA Passed	4.3	9/2/2025	Confirmation email to Federal Project Officer
Warranty Period Complete, Turnover to Operations Team	4.3	9/30/2025	Confirmed in quarterly report

PROJECT SCHEDULE AND DELIVERABLES

Complete the following table to provide the schedule and estimated cost for executing each of the tasks and subtasks described in the SOPO.

SCHEDULE & COST SUMMARY				
SOPO Task/ Subtask Number	SOPO Task/Subtask Title	Planned Start Date	Planned Completion Date	Planned Total Cost
1.0	Project Management and Planning	10/1/2024	9/30/2025	
1.1	Project Management Plan	10/1/2024	11/8/2024	
1.2	Interoperability/Cybersecurity Plan	10/15/2024	11/15/2024	
2.0	Solutions for Vulnerability Scanning	10/1/2024	5/27/2025	
2.1	Planning, Analysis, and Design for Vulnerability Scanning	10/1/2024	12/20/2024	
2.2	Start-up and Launch Expansions for Vulnerability Scanning	11/12/2024	4/1/2025	\$ 89,000
2.3	Testing and Validation for Vulnerability Scanning	4/1/2025	5/27/2025	
3.0	Assess and Implement Technology Solutions for Network Detection & Response (NDR)	10/1/2024	9/30/2025	
3.1	Planning, Analysis, and Design for NDR solution	10/1/2024	2/18/2025	
3.2	Implement/Build/Start-up for NDR solution	2/4/2025	8/5/2025	\$450,500
3.3	Testing and Validation for NDR solution	8/5/2025	9/30/2025	\$ 50,000
4.0	Assess and Implement Technology Solutions for System Integration	4/15/2025	9/30/2025	
4.1	Planning, Analysis, and Design for System Integration	4/15/2025	6/10/2025	
4.2	Implement/Build/Start-up for System Integration	5/27/2025	8/5/2025	\$100,500
4.3	Testing and Validation for System Integration	7/8/2025	9/30/2025	\$110,000

DELIVERABLES LOG		
SOPO Task/ Subtask Number	Deliverable	Planned Completion Date
1.0	Project Management Plan - Due 30 days after award	11/8/2024
1.2	Interoperability/Cybersecurity Plan (Low Risk)	11/15/2024
2.1	System Architecture Document (Design Specification)	12/20/2024
2.3	Testing and Validation plan for the vulnerability scanning solution.	4/1/2025
3.1	System Architecture Document (Design Specification)	2/18/2025
3.3	Testing and Validation plan for the Network Detection & Response (NDR) solution	8/5/2025
4.1	System Architecture Document (Design Specification)	6/10/2025
4.3	Testing and Validation plan for the Technology Solutions for System Integration	8/5/2025

METRICS

PROJECT METRICS			
SOPO Task/ Subtask Number	Tracking Metric	Units	Goal
2.0	Footprint increase for monthly scans	# of devices covered	Increase by 10%
2.0	Growth capacity	Available Devices	0 unassigned licenses → 500 available
2.0	Maximum devices/monitoring points/etc. supported	Count	5500 → 6500
2.0	Report Retention capacity	Days retained	90 → 180
2.0	Longest scan time	Runtime	Reduce by 20%
2.0	% of scans complete during normal business hours	Percentage	80%
2.0	# of scans over 10 hour run time	# per month	Two
3.0	Reduce number of OT subnets with unmonitored traffic.	Number of Servers	Reduce by 25%
3.0	Monitor Water's designated 'High Risk' sites	Percentage	80%+ coverage
3.0	Capability to detect and trace lateral movement during an event/intrusion	Pass/Fail	Pass
3.0	Capability to establish baselines of traffic patterns (MTTR, MTTA)	Pass/Fail	Pass
3.0	Process metrics <ul style="list-style-type: none"> Average Time to NOC report Average Time from NOC to MIRT 	Time	Reduce by 20%
4.0	Reporting Efficiency Effort hours to prepare monthly Vulnerability Report	FTE Days	2 Days → < 1 Day

RISK MANAGEMENT

Complete the following table to identify both internal and external risks (i.e., technical, resource, management, etc.), that may impact the likelihood of project success. For each identified risk, indicate any relevant task/subtask, likelihood of occurrence and the extent and potential impact on successful project completion.

RISK MANAGEMENT LOG			
Risk	Likelihood (High, Medium, Low) Impact (High, Medium, Low)	Potential Impact (Identify SOPO Task/Subtask, if applicable)	Mitigation Strategy
Resource Shortage	Likelihood: Medium Impact: Medium	All Tasks Impacts: Depending on the resource and timing, impact would range from slow-down to stopping progress within a work stream	Maintain strong communication with executive sponsors to justify elevated priority; Modularize schedule to allow for resource substitution (supporting strategy: strict adherence to documentation standards <i>and timing</i> to enable transition to supplemental staff);
Hardware/ Implementation Specialist unavailable or suffer delivery delays	Likelihood: Low Impact: High	SOPO 2.2 SOPO 3.2 SOPO 4.2 Impact: Where specialized material or contractors are required, the implication is that JEA lacks the required specialization internally. Progress will effectively halt until that specialized resource has been replaced.	Aggressive prescreening of suppliers/resources to validate availability before signing agreements; Negotiate compensation terms for delays; Include buffer time for tasks on critical path; Identify secondary sources/partners;
Software Compatibility Risk	Likelihood: Low Impact: Medium	SOPO 2.2, 2.3 SOPO 3.2, 3.3 SOPO 4.2, 4.3 Impact: Incompatibilities in software may require the development of custom interfaces or reconfiguration of one of the participating systems, adding scope to the project.	Preference for expanding footprint of existing products; Engage specialist implementation partners with proven track record;

Budget overrun: Inflation since initial market survey	Likelihood: Medium Impact: High	SOPO 2.1 SOPO 3.1 SOPO 4.1 Impact: Price increases to hardware will trigger a value engineering process, likely either reducing scope of coverage to the highest priority assets (e.g. only CIP designated TCA servers have a dedicated sensor), or changing the implementation strategy (e.g. a network deployed sensor monitors a subnet of servers – with a reduced level of access compared to a sensor running on-device/in-memory).	Refresh pricing commitments early in design process; Ensure designs are adaptable to substitution (e.g. one network tap device vs. individual server agents);
Compliance Requirements Change	Likelihood: Low Impact: Low-High	SOPO 2.1 / All SOPO 3.1 / All SOPO 4.1 / All Impact: Unpredictable but cannot be avoided. Theoretically could range up to disqualifying a selected solution or technology.	Regular engagement of CIP Compliance in design reviews; Proactive design – anticipate proposed changes to CIP regulations and provide a transition path;

Provide a narrative below the table that describes the project's risk management process, including at a minimum: monitoring frequency, new risk identification, risk retirement, and team member involvement.

Risk Management at JEA

JEA's Project Management Office (PMO) has a structured project delivery methodology that will be used internally for the execution of this project.

Risk management is incorporated at multiple points within this framework.

- A. Risk and Issues are regularly monitored during recurring Status Calls, where the Project Leader and the functional leads share updates including any newly identified risks, mitigation activities performed and/or risks realized.
 - a. Monthly Status Reports (audience: the Technical Services Leadership Team, PMO, plus any Technical or Business Owners related to the project) includes a dedicated Risk section to highlight newly identified risks, emerging & escalating risks, and risks currently requiring active measures for management/mitigation.
 - b. Technical Team meetings monitor the progress of risk management and mitigation activities. Ad-hoc discussions may result in the identification of new risks or indicate a need for more active measures. These concerns are escalated and captured in the Project's Risk Register.
- B. The initial Risk Register collaboratively developed by project & team leads is frequently supplemented by the findings of the Design Approval Board (DAB). Multidisciplinary reviews of the project design and system architecture are performed at the 30%-60%-90% stage gates, with final acceptance required before the Change Approval Board (CAB) will authorize deployment to the Production Environment.
- C. All projects affecting assets in scope of the Critical Infrastructure Protection (CIP) plan must remain compliant with the regulations of that program. The choice of mitigation or management strategies for selected risks may be informed by the CIP program specifically, or by the JEA Policies and Procedures implemented to ensure compliance.

Award #7 Supporting Documents 03-27-2025

1411829647 (RFP) 15kV Substation Switchgear Projects - Appendix B - Bid Forms

Submit the Response via electronic pdf in accordance with the procedures in the solicitation

Company Name: **Powell Electrical Systems**

Company's Address: **8550 Mosley Rd Houston TX 77075**

License Number: **MAF-10726**

Phone Number: **713-208-2157** FAX No: _____ Email Address: **matt.smith@powellind.com**

BID SECURITY REQUIREMENTS

- ☒ **None required**
☐ Certified Check or Bond Five Percent (5%)

TERM OF CONTRACT

- ☐ One Time Purchase
☐ Term -----
☒ **Other, Specify - Project Completion**

SAMPLE REQUIREMENTS

- ☒ **None required**
☐ Samples required prior to Bid Opening
☐ Samples may be required subsequent to Bid Opening

SECTION 255.05, FLORIDA STATUTES CONTRACT BOND

- ☒ **None required**
☐ Bond required 100% of Bid Award

QUANTITIES

- ☐ Quantities indicated are exacting
☒

Quantities indicated reflect the approximate quantities to be purchased Throughout the Contract period and are subject to fluctuation in accordance with actual requirements.

INSURANCE REQUIREMENTS

Insurance required

PAYMENT DISCOUNTS

- ☐ 1% 20, net 30
☐ 2% 10, net 30
☐ Other _____
☒ None Offered

Item No.	ENTER YOUR BID FOR THE FOLLOWING DESCRIBED ARTICLES OR SERVICES:	BID PRICE
1	Georgia Street	\$4,766,252.00_____
2	College Street	\$5,695,238.00
3	Kennedy	\$1,831,032.00
4	Total Bid Price	\$12,292,522.00_____

5 year warranty per specification (Adder): Georgia: \$333,000.00 College: \$393,000.00 Kennedy: \$126,000.00

Note: Project terms required standard warranty (12/18 months) that is included in base bid

Offload Cranes budget (Adder): See detailed Service proposal

Freight will be prepay and add, cost plus 20% (price is included in base bid above) Powell can not quote firm freight 2 years out.

Project terms to be negotiated or Powell proposes using same terms as St. Johns substation project

☒ **I have read and understood the Sunshine Law/Public Records clauses contained within this solicitation. I understand that in the absence of a redacted copy my proposal will be disclosed to the public "as-is".**

BIDDER CERTIFICATION

1411829647 (RFP) 15kV Substation Switchgear Projects

Award #7 Supporting Documents 03-27-2025

1411829647 (RFP) 15kV Substation Switchgear Projects - Appendix B - Bid Forms

By submitting this Bid, the Bidder certifies that it has read and reviewed all of the documents pertaining to this Solicitation, that the person signing below is an authorized representative of the Bidding Company, that the Company is legally authorized to do business in the State of Florida, and that the Company maintains in active status an appropriate contractor's license for the work (if applicable). The Bidder also certifies that it complies with all sections (including but not limited to Conflict Of Interest and Ethics) of this Solicitation.

We have received addenda

1-3through



Bobby Joe Paul – Powell Electrical Systems, Inc.
Sales Director 11/18/2024

GENERAL

THE MINIMUM QUALIFICATIONS SHALL BE SUBMITTED ON THIS FORM. IN ORDER TO BE CONSIDERED A QUALIFIED BIDDER BY JEA YOU MUST MEET THE MINIMUM QUALIFICATIONS LISTED BELOW, AND BE ABLE TO PROVIDE ALL THE SERVICES LISTED IN THIS SOLICITATION.

THE BIDDER MUST COMPLETE THE BIDDER INFORMATION SECTION BELOW AND PROVIDE ANY OTHER INFORMATION OR REFERENCE REQUESTED. THE BIDDER MUST ALSO PROVIDE ANY ATTACHMENTS REQUESTED WITH THIS MINIMUM QUALIFICATIONS FORM.

BIDDER INFORMATION

COMPANY NAME: Powell Electrical Systems

BUSINESS ADDRESS: 8550 Mosley RD

CITY, STATE, ZIP CODE: Houston, TX 77075

TELEPHONE: 713-208-2157

FAX: _____

E-MAIL: matt.smith@powellind.com

PRINT NAME OF AUTHORIZED REPRESENTATIVE: Matt Smith

SIGNATURE OF AUTHORIZED REPRESENTATIVE:  _____

TITLE OF AUTHORIZED REPRESENTATIVE: Regional Sales Manager

MINIMUM QUALIFICATIONS:

Respondent must meet the following Minimum Qualifications to be considered eligible to have its Response evaluated by JEA. Respondent must complete and submit the Minimum Qualification Form provided in this Solicitation. Respondents that are working or have worked for JEA in the past 2 years involving similar work must submit JEA as a reference. JEA reserves the right to ask for additional back up documentation or additional reference projects to confirm the Respondent meets the requirements stated above.

JEA may reject Responses from Respondents not meeting all of the following Minimum Qualifications:

- I. The Respondent must have successfully self-performed similar work preceding the Response Due Date.
 - II. Respondent must not be on the State of Florida Convicted Vendor List, State of Florida's Suspended Vendor List, the City of Jacksonville's Disqualified Vendor List, have their bidding privileges actively suspended by JEA, been debarred by JEA, or have had a contract with JEA was terminated for default within the last two (2) years.
- Bidder must be on the list of JEA's approved manufacturers for Arc-Quenching Switchgear.
 - Current List: Powell Switchgear, Switchgear Power Systems, LLC
 - Bidder shall provide utility references to confirm the successful completion for three (3) projects that each include the design,

1411829647 (RFP) 15kV Substation Switchgear Projects

Award #7 Supporting Documents 03-27-2025

1411829647 (RFP) 15kV Substation Switchgear Projects - Appendix B - Bid Forms

fabrication, testing, documentation, delivery, and installation of 15kV Class Arc Terminating Outdoor Metal Clad Switchgear and associated walk-in enclosures in the United States, within the last five (5) years ending September 30, 2024.

Award #7 Supporting Documents 03-27-2025

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Each project reference should include the following:

Project Reference 1

Company Name: JEA_____

Company Contact Name: Patricia Murphy_____

Company Contact Phone Number: 904-665-7289_____

Company Contact E-Mail Address: murppc@jea.com_____

Project Completion Date: Ongoing_____

Where was this project installed? St. Johns_____

Does this project include the design, fabrication, testing, documentation, delivery, and installation of 15kV Class Arc Terminating Outdoor Metal Clad Switchgear and associated walk-in Enclosure? Yes [] No []

Description of Project (include manufacturer name for switchgear, building and breakers used for project):

Powell MV gear with arc quenching in Powell PDC

Project Reference 2

Company Name: Tampa Electric_____

Company Contact Name: Jay Polizzi_____

Company Contact Phone Number: 813-299-6594_____

Company Contact E-Mail Address: jpolizzi@tecoenergy.com_____

Project Completion Date: 8/1/22_____

Where was this project installed? Yes, Washington Street_____

Does this project include the design, fabrication, testing, documentation, delivery, and installation of 15kV Class Arc Terminating Outdoor Metal Clad Switchgear and associated walk-in Enclosure? Yes [x] No []

Description of Project (include manufacturer name for switchgear, building and breakers used for project):

Powell MV arc resistant switchgear in Powell PDC

Project Reference 3

Company Name: Oncor Electric_____

Company Contact Name: Dennis Johnson_____

Company Contact Phone Number: 817-996-7906_____

Company Contact E-Mail Address:dennis.johnson@oncor.com_____

Project Completion Date: 2/15/24_____

Where was this project installed? Dallas TX_____

Does this project include the design, fabrication, testing, documentation, delivery, and installation of 15kV Class Arc Terminating Outdoor Metal Clad Switchgear and associated walk-in Enclosure? Yes [x] No []

Description of Project (include manufacturer name for switchgear, building and breakers used for project):
Powell MV arc resistant gear in Powell PDC

Project Reference 4

Company Name: Dominion Energy_____

Company Contact Name: Bobby Rich_____

Company Contact Phone Number: 804-257-4082_____

Company Contact E-Mail Address: bobby.a.rich@dominionenergy.com_____

Project Completion Date: 1/2022_____

Where was this project installed? Virginia_____

Does this project include the design, fabrication, testing, documentation, delivery, and installation of 15kV Class Arc Terminating Outdoor Metal Clad Switchgear and associated walk-in Enclosure? Yes [x] No []

Description of Project (include manufacturer name for switchgear, building and breakers used for project):
Powell MV arc resistant gear in Powell PDC

LIST OF SUBCONTRACTORS

JEA Solicitation Number _____ requires certain major Subcontractors be listed on this form, unless the work will be self-performed by the Company.

The undersigned understands that failure to submit the required Subcontractor information on this form will result in bid rejection, and the Company agrees to employ the Subcontractors specified below: (Use additional sheets as necessary)

Note: This list of Subcontractors shall not be modified subsequent to bid opening, without a showing of good cause and the written consent of JEA.

Type of Work	Corporate Name of Subcontractor	Subcontractor Primary Contact Person & Telephone Number	Subcontractor's License Number (if applicable)	Percentage of Work or Dollar Amount
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Work will be self performed.

Signed: _____

Company: _____

Address: _____

Date: _____

LIST OF JSEB SUBCONTRACTORS

The following JSEB Subcontractors will be utilized in fulfilling the terms and conditions of a Project Authorization arising from award of JEA - _____. I (We) the undersigned understand that failure to submit said information will result in bid rejection. I (We) will employ the JSEB Subcontractors specified below: (Use additional sheets as necessary)

Class of Work (Category) Dollar Amount	Name of JSEB Contractor (Indicate below)	Percentage of Total Job or

Signed:_____

Company:_____

Address:_____

Date:_____

Note: This list shall not be modified subsequent to bid opening without a showing of good cause and the written consent of the JEA.



VENDOR CONFLICT OF INTEREST DISCLOSURE FORM INSTRUCTIONS

Vendors shall not try to gain an unfair competitive advantage or influence the ability of JEA officers and employees to make impartial and objective decisions on behalf of JEA.

All vendors interested in conducting business with JEA must complete and return the Vendor Conflict of Interest Disclosure Form found on the following page in order to be eligible to be awarded a contract with JEA. Please note that all vendors are subject to comply with JEA's conflict of interest policies provided below.

1. No JEA officer (e.g., JEA Board member and elected City official) or employee has an ownership interest of more than 5% in vendor's company.
2. No JEA officer or employee is an officer, director, partner or proprietor of vendor's company.
3. No JEA officer or employee is employed by or being considered for employment by vendor's company.
4. No JEA officer or employee work as a consultant or has a contractual relationship with vendor's company.
5. No JEA officer or employee will derive a personal financial gain or loss from this contract.
6. No relative of a JEA officer or employee will derive a personal financial gain or loss from this contract. (Relatives include a father, mother, son, daughter, husband, wife, brother, sister, father-in-law, mother-in-law, son-in-law, or daughter-in-law.)

If a vendor has one or more relationships with a JEA officer or employee or a relative of a JEA officer or employee that meets the criteria described above, then the vendor shall disclose the information by completing the Conflict of Interest Form on the following page.



CONFLICT OF INTEREST DISCLOSURE FORM

Award #7 Supporting Documents 03-27-2025

1411829647 (RFP) 15kV Substation Switchgear Projects - Appendix B - Bid Forms

Disclosing a potential conflict of interest does not disqualify vendors. In the event vendors do not disclose potential conflicts of interest, and they are detected by JEA, vendor may be **disqualified** from doing business with JEA.

Questions about this form? Contact (JEA, Buyer)

JEA Bid/Solicitation/Contract Number:	Name of JEA Employee(s) Working on Vendor's Current Contract(s) with JEA:	
Vendor Name:		Vendor Phone:
Vendor's Authorized Representative Name and Title:		Authorized Representative's Phone:
NAME(S) OF JEA EMPLOYEE(S) / PUBLIC OFFICER(S) WITH POTENTIAL CONFLICT OF INTEREST		
Name of JEA public officer(s), employee(s), or relatives with whom there may be a potential conflict of interest. If more than five, attach a second form.		Relationship of JEA public officer(s)/employee(s) and/or relative(s) to vendor's company from list above (e.g. 1(a), 2, etc.). Please list all that apply:
1.		
2.		
3.		
4.		
5.		
<input type="checkbox"/> Vendor has no conflict of interest to report.		
<input type="checkbox"/> Vendor hereby declares it has not and will not provide gifts or hospitality of any dollar value or any other gratuities to any JEA officer or employee to obtain or maintain a contract.		
<input type="checkbox"/> I certify that this Conflict of Interest Disclosure has been examined by me and that its contents are true and correct to my knowledge and belief and I have the authority to so certify on behalf of the Vendor.		
Vendor's Authorized Representative Signature:		Date:
<hr/>		

FOR JEA USE ONLY IF CONFLICT NOTED

This form has been reviewed by:

Name of JEA Ethics Officer:	Signature:	Date:

Award #7 Supporting Documents 03-27-2025

1411829647 (RFP) 15kV Substation Switchgear Projects - Appendix B - Bid Forms

Note: **NOT APPLICABLE**



PROPOSAL No. 261652_REV1
December 2, 2024

REFERENCE: Georgia, Kennedy and College St Substations

JEA

Attn: Jason Behr
Email: behrijv@jea.com
Phone: 904.226.0689

We are pleased to offer the following proposal, which is our understanding of your requirements, subject to acceptance within 30 days from the above date. Please advise us if there are any misunderstandings. This quotation is also subject to change upon notice.

Powell is pleased to submit the following equipment proposal for your review and consideration.

The Equipment Descriptions and Bills of Material presented represent our best understanding of your equipment requirements based on the specifications, one-line drawings, and data sheets provided with the inquiry package.

Please review the content of our proposal and advise any changes or additions required to meet your specific project needs. Pricing submitted is based on the Bills of Material and Equipment Descriptions listed within this proposal.

Also note that any purchase order resulting from this proposal must reference the Powell proposal number in the contract documents.

Thank you for the opportunity to earn your business. Our Bill of Material and Pricing is as follows:



REFERENCE: Georgia, Kennedy and College St Substations

Power Control Room
Tag Number: Georgia Street T1 PCR

One (1) Powell PCR®, Power Control Room suitable for installation in an unclassified area with approximate exterior dimensions of:

15' 0" Wide with 6" wall thickness	Low ambient temperature: 38°F
33' 0" Long with 6" wall thickness	High ambient temperature: 93°F
11' 0" High less base and roof cap (interior height)	Altitude: 36 FT. above sea level

Estimated shipping dimensions and weight:

15' 9" Wide including 4.5" overhang on each side	Roof live load: 20 PSF
33' 0" Long with no overhang on each end	Floor live load: 150 PSF
13' 7" High including base and roof cap (approximate)	Basic wind speed: 135 MPH
Estimated weight including equipment: 58,003 LBS	

Structural Base:

- Welded channel construction, skid type, with structural supports and removable lifting lugs
- Steel floor, 1/4" thick with non-skid paint.
- 17 Floor penetrations, with surface mounted covers

Metal Preparation and Paint Finish:

- The welded base assembly is grit blasted to comply with the Commercial Blast Standard SSPC-6 as published by AISC.
- After blast, a primer is applied to the entire base using an industrial grade, high solid, and high build epoxy. The primer is applied to a minimum thickness of 4 mils.
- The structural elements of the base including all channels and angles are caulked to seal gaps and spaces that might allow moisture to collect.
- A second application of industrial grade, high solid, high-build epoxy is applied to the bottom of the base assembly. This application is BLACK in color and is applied to a minimum thickness of 4 mils.
- The sides of the base are finished using a black polyurethane paint with a minimum thickness of 2 mils.
- Total dry film thickness after coating:
 - For the top of the floor is 6 mils minimum
 - For the sides of the base is 6 mils minimum
 - For the bottom of the base is 8 mils minimum



REFERENCE: Georgia, Kennedy and College St Substations

- Exterior interlocking panels, will be White (ANSI 01) per Powell Application Procedure. All interlocking panels and interior wall liners are pre-painted prior to assembly. An all-weather sealant is applied to all seams.

Exterior Wall, Interior Wall, Ceiling, and Roof Panels:

- Exterior walls and roof to be constructed of interlocking Powell, Pow-R-Loc panels. The design as a minimum, is to meet wind load requirements of FBC 2023
- Wall panels of 18 gauge galvanized steel painted Gray (ANSI 61) (Textured)
- Roof panels of 18 gauge galvanized steel painted White (ANSI 01) (Smooth)
- Interior wall liner panels 16 gauge galvanized steel painted White (ANSI 01) (Smooth)
- Interior ceiling panels 14 gauge galvanized steel with integral Powl Strut System painted White (ANSI 01) (Smooth)
- Roof will have a slope of 1/4 inches per foot minimum
- 80 Linear feet of Painted Aluminum Gutter with Downspouts to Grade

Insulation for Base, Walls and Roof:

- Polyurethane spray on foam (2" R-13.4), meets ASTM E84 Flame Spread Test
- 6" code compliant wall with effective R-18.3 continuous insulation
- Code compliant roof with effective R-35.6 continuous insulation

Doors and Hardware:

- 2 Sets of aluminum panic door hardware, with door closer & key lock
- 2 Equipment door, single wide, 4' x 9', Painted Galv Steel, with 12" X 12" viewing window
- 8 Painted galvanized equipment rear access doors without split
- 2 Rain canopies over SINGLE wide equipment doors (Alu.)
- 25 Linear feet of drip shield over rear access doors (Alu.)

The PCR® will include the following accessory items:

- 1 AC Panel 208/120VAC, 3 Phase, 4 Wire, 250A Main Bus, 42ckt with 150A Main Breaker, 22kAIC
- 1 Building services transformer, 480-120/208 volt 3 phase 45 kVA, Type DOE2016, Copper windings, 150 degree C rise
- 1 Lot of Interior Vapor Tight LED lighting fixtures
- 2 Interior LED lighting fixtures, with a minimum 90 minutes emergency battery backup
- 2 Light switches



REFERENCE: Georgia, Kennedy and College St Substations

- 4 Convenience receptacles
- 2 Exterior GFCI receptacles
- 2 Exit & Emergency Light Combo with dual LED lamps, 120/277 VAC
- 1 Lot of EMT conduit and wireway for interior and RGS for exterior building services
- 1 Lot of THHN/THWN wiring for utility lights, receptacles and space heater circuits

Equipment Power and Control Wiring and Interconnections:

- 45 Feet of cable tray 6" wide x 4" deep galvanized with covers
- 80 Feet of cable tray 24" wide x 4" deep Aluminum
- 1 Cable tray tees 4" deep 24" wide
- 4 Cable tray elbows 4" deep 24" wide
- PCR Power wiring limited to 218 Terminations
- PCR Control wiring limited to 8 Terminations
- PCR Instrumentation wiring limited to 60 Terminations
- PCR Communication wiring limited to 10 Terminations

Grounding System:

- 110 Linear feet of bare Copper ground bus 1/4" x 2"
- 4 Copper ground pads on diagonal corners of building frame
- 10 Interconnection from each equipment ground bus to building frame
- 2 Interconnection from each equipment ground bus to building ground loop

Exterior Devices:

- 2 General Purpose exterior light, LED Wall Pack, 70W Metal Halide Equivalent

UPS and DC System Components:

- 1 Battery exhaust fan and duct assembly
- 1 Hydrogen Gas Detector Powell standard
- 1 Eye Wash & Bowl
- 1 Mechanical installation of a Stackable 125 VDC Battery System
- 1 Furnished and install Safety Disconnect Switch, Non-Fusible, 2-Pole, NEMA 1, 100A

Standard HVAC System:

- 1 Building HVAC system for a non-classified area, to include:



REFERENCE: Georgia, Kennedy and College St Substations

- 2 3-Ton Wall mounted HVAC with 6.8kW electric heat unit, 208-230V, 3-phase, 60Hz to include:
 - BARD 11.0 EER HVAC part no. W36AF-B09XXXXJ
 - Aluminum air conditioner cabinet
 - Low Ambient control with Barometric Damper for compressor operation down to 0° Fahrenheit
 - Compressor control module located on the Back side, adjustable from 30 seconds to 5 minutes
 - Phase rotation monitor
 - High and Low pressure switches with built-in auto-reset
 - Factory installed internal disconnect MCCB, padlockable
 - MERV2 1-in disposable air filter
 - Dry contracts for remote alarm or lockout
 - Auto changeover digital thermostat
 - ANSI/UL STD 60335-1 & 60335-2-40/CSA STD C22.2 #60335-1 & #60335-2-40

HVAC Accessories:

- 1 Lead lag controller, 2 units, MC4002
- 1 High temperature alarm
- 2 Safety Disconnect Switch, Non-Fusible, 3-Pole, NEMA 3R, installed on wall mounted HVAC

Mechanical Equipment Installation:

- 1 Lot of installation of Powell furnished equipment to include:
 - 8 Sections of Medium Voltage Switchgear
 - 1 Mechanical installation of a circuit breaker test cabinet
 - 2 Wall Mounted HVAC Unit(s)
 - 1 Wall Mounted NEMA 1 Enclosure with Annunciator SEL 2533012130XA2X0 (2533#PGBF)
 - 1 Wall Mounted fold-away workbench, 28"D x 48" Long, made of polyethylene, 300LBs work surface capacity

Miscellaneous:

- 1 Installation Chatsworth Fiber optic rack (Chatsworth 55053-103)
- 2 Door Limit Switch contact alarms (Honeywell DTE6-2RN2)
- 1 Class D Halotron 11 lb. Fire Extinguisher (Kidde 4XP83)
- 1 Lot of Internal device nameplates if required



REFERENCE: Georgia, Kennedy and College St Substations

- 1 Structural Analysis by Professional Engineer for the State of Florida to confirm PCR design and structural integrity per FBC 2023
- 1 State of Florida code compliance licensing fee
- Powell's PCR design shall be guided by FBC 2023 and FBCEC 2023
- Equipment clearance and egress proposed are based on the NEC 2020


REFERENCE: Georgia, Kennedy and College St Substations

Fire Detection System
Georgia Street T1

The building is protected by a conventional fire alarm system. Building fire alarm control panel will power and monitor all of the fire detection devices and operate the fire detection audible and visual devices for the building. We have relays in the fire alarm panel for tie in by others to shut down the HVAC units upon an alarm condition and notify the customer of alarm and trouble conditions.

Georgia Street T1 PCR Building Dimensions: 33' x 15' x 11'
(There is no suspended ceiling or raised floor in the building)

Qty	Manufacturer	Description
1	Fire-Lite	MS4 Conventional Fire Alarm Panel
2	Powersonic	PS1270 Battery 12 volt 7 amp.hr.
2	Fire-Lite	Photoelectric Detector with Base
2	Fire-Lite	Manual Pull Station
1	Fire-Lite	Alarm Horn Strobe
1	Fire-Lite	HVAC Controller Relay
2	Fire-Lite	Client Relay for SCADA Tie In By Others
1 lot	Advantage	Installation Labor and Materials

SCOPE OF WORK
1. General.

- 1.1. Provide shop drawings, calculations, and submittal literature.
- 1.2. Provide "as-built" drawings and "Operation & Maintenance Manuals" subsequent to the completion of the installation.
- 1.3. Testing in the presence of the Authority Having Jurisdiction at the Powell facility in Houston, Texas.
- 1.4. Provide labor and materials for the installation of all Advantage Interests supplied equipment.

2. Conventional Fire Detection Systems.

- 2.1. Provide new fire detection equipment for Powell RFQ 261652 dated 10-29-24, subsequent emails and phone conversations.
- 2.2. Provide photoelectric detectors, manual pull stations, audible visual devices, fire detection control panels, and associated hardware to complete the installation of the conventional fire detection systems.



REFERENCE: Georgia, Kennedy and College St Substations

Battery

(1) DC PowerCab – Part No. 4BG8220NTBAC00 to include:

DC PowerCab

4: Cabinet Type: NEMA 1, indoor, steel construction, 30.5W x 31.5D x 79H

B: Number of Cabinets: 1 cabinet, key lock main door, finger turn latch access to breakers, field selectable bottom/top cable entry

G: Cabinet Finish: ANSI 61 gray finish

8: DC Output Voltage: 120

1: Number of Battery Strings: 1 String

10: Battery Capacity: 100AH (nominal)

Battery: 96AH; one 96Ah battery string

DEKA Unigy I, 12AVR100ET or similar

10 year design life.

Flame Retardant, UL94-VO/L.O.I. 28%

Total Electrolyte Volume: 13.5 gallons

Short Circuit Current: 3,070 amps

Hydrogen Evolution: See the attached Battery Ventilation Requirements

Weights and Dimensions: See the attached Rack Drawing and Info.pdf

N: Output Current: 16 Amps, 20 Amp Breaker (charger to panelboard)

T: Input Voltage: 115-120/208/230-240 V, 60 Hz, single phase

B: Feature Package: Eliminator Plus package: Eliminator + reverse polarity diode, blocking diode

A: Alarms and Communication: Summary Form C alarm (30V/2A)

C: DC Load Center: Internal Panel, 100A 2-pole Battery Main, 2-pole Charger Feed + 12 2-pole DC breaker positions

0: Low Voltage Load Disconnect: None

0: Inverter: None

10 year design life

1 cabinet(s), each: 30.5 in (W) x 31.5 in (D) x 79 in (H)

DC circuit breakers are ordered as a separate line item and are not indicated within the PowerCab part number.

PLEASE NOTE THAT THIS POWERCAB MAY BE BROKEN APART INTO
MULTIPLE LINE ITEMS ON THE CUSTOMER ORDER CONFIRMATION AND/OR
THE INVOICE



REFERENCE: Georgia, Kennedy and College St Substations

This PowerCab includes the charger: Q120016TL514A

EnerGenius IQ

120: DC Output Voltage: 120 VDC

16: Output Current: 16 ADC

T: AC Input Voltage: 115-120/208/230-240 V, 60 Hz, single phase

L: Agency Marks: C-UL 1012 listed (60 Hz units)

514: Feature Package: Standard breaker, standard filter plus lower ripple filter, reverse polarity diode, blocking diode

120 V Eliminator Output Filtering: 30 mV ripple filter with battery or 100 mV without battery

10 kAIC Input Breaker

A: Alarms/Communication: Summary Form C alarm (30V/2A)

Summary-LCD display with one (1) programmable summary form C contact to alarm on issues such as AC Fail, charger fail, low DC voltage, high DC voltage, ground fault positive or negative, battery check fail

Mounting/Additional Features: Wall mount

Output Breaker Rating is 10 kAIC

SENS EnerGenius® IQ2 Filtered battery charger, fully automatic

Dual microprocessor controlled

Front panel user interface

Digital amp and volt meters

On-board battery checking

Load Share Capable; load kit cable quoted separately

AC and DC breakers

UL/C-UL listed

Seismic certified to IBC 2006-2021 to an Sds value of 2.50g

19.4 in (W) x 13.0 in (D) x 17.6 in (H), 186 lbs

Estimated Weight: 1,475 lbs.

UL/cUL Listed

Heat Loss for the charger: 246 watts



REFERENCE: Georgia, Kennedy and College St Substations

(12) Part Number BP-GHB2020 to include:

20A, Two Pole DC Breaker for the DC Distribution Panel in the above PowerCab. Breaker capacities from 15A to 60A are also available at the same price per breaker. Up to 12 breakers can be used in the DC distribution panel in the PowerCab. Number of circuits or breaker capacity were not specified; the quantity quoted here provides one distribution breaker per switchgear breaker, plus two spare breakers. The breaker ampacity was not provided; the customer is responsible for verifying that the breakers are correct for the application.

Estimated Shipping and Handling Charges - Shipping and handling – PowerCab system as quoted above

Shipping and handling Estimated to Houston, TX 77061 via standard ground transportation.

This freight estimate assumes no options such as a tailgate lift is required on site.

This freight estimate is included to provide an approximate freight cost to the customer. Our freight terms are FCA factory. SENS will pre-pay freight charges and add them to the customer's invoice upon request. The amount invoiced will be based on the actual freight charges.



REFERENCE: Georgia, Kennedy and College St Substations

Stairs and Landings

Tag Number: T1 SWGR - GEORGIA ST.

- (1) Lot Stairs, Platforms, and Removable Handrails to include:
Approx. Weight 3,578 lbs. per Stair & Platform**

Platform Sizes (shipping sections) are as follows:

- Two (2) 6'L x 6'W Platforms.
- Two (2) Stairways approx. 3' 4"L x 3'W x 8"H. Top of Stairs to be 15" above grade

P.E. Structural Load Calcs./ Stamped Dwgs for the State of Florida.

- Review to be done after Grimes dwgs are approved for construction

All Stairs & Platforms listed below will be built per IBC & the following:

- All platform perimeters shall be of A-36 C10 x 15.3# w/ C6 x 8.2# channel cross members & 2" x 1/4" angle grating support.
- All platforms to have 19-W-4 1-1/4" x 3/16" serrated bar grating walking surface.
- 1-1/2" Sch. 40 removable pipe Railing with 3" x 3/8" Flat Bar uprights.
- Additional 1-1/2" Sch. 40 pipe stairway handrail at 36" above nosing of stair treads on both sides of stairway.
- 4" x 1/4" Flat bar toe plates around all platform perimeters.
- Platform support columns to be of HSS 3" x 3" x 1/4" w/ 7" x 7"x 3/8" top & 8" x 8" x 3/8" bottom plates.
- Stair stringers to be of A-36 C8 x 11.5# Channel with 19-W-4 1-1/4" x 3/16" serrated bar grating welded treads w/checkered nosing.
- All components to be ASTM A123 Spec. Hot Dip Galvanized (post assembly) unpainted.
- Approval drawings will be 2-3 weeks after receipt of Customer approved PDC Plan View & Elevation Dwgs.
- Platforms will have location designation welded on platforms as required.
- Anchoring design and hardware by others, all other hardware is included in price.



REFERENCE: Georgia, Kennedy and College St Substations

13.2kV Metal Clad Switchgear

Tag Number: T1 SWGR - GEORGIA ST.

One (1) line-up of PowlVac® metal clad switchgear with vacuum circuit breakers designed in accordance with ANSI standards C37.04, C37.06, C37.20.2, and rated as follows:

Maximum Voltage Class:	15 kV
Service Voltage:	13.2 kV
Basic Impulse Level:	95 kV
Power Frequency Withstand:	36 kV
Voltage Range (K factor):	1
Short-circuit Current Rating:	25 kA rms
Close and Latch Capacity:	65 kA Peak
Close Voltage:	125 VDC
Trip Voltage:	125 VDC
Frequency:	60 Hz

(8) Vertical sections of metal clad switchgear each with the following common features:

- Indoor enclosure, NEMA 1, 11 gauge steel
- Basic one high construction including a standard rear access door as an integral part of the PCR®
- Laminated plastic mimic bus
- 3000A main bus, silver plated copper, 3 phase, 3 wire
- Flame retardant and track resistant Bonded Epoxy bus insulation system
- Epoxy main bus pass through insulators in a glass polyester mounting
- Carbon steel Grade 5 mounting hardware, plated for corrosion protection
- Phase polarity 1 2 3 or A B C, front to back, top to bottom, left to right
- Ground bus, 1/4 x 2, copper with plating to match main bus
- Control terminal blocks, 600 volt, 30 ampere
- Control wiring, 14 gauge, 41 strand, type SIS with VW-1 flame retardant rating
- Control wire termination, insulated, locking fork/spade tongue, crimp type
- Current transformer shorting type terminal blocks
- Current transformer wiring, 10 gauge, 105 strand, type SIS with VW-1 flame retardant rating
- Current transformer wire termination, insulated, ring tongue, crimp type
- Wire harnesses
- Common DC bus #8 AWG SIS wire with seamless ring tongue terminations
- Raised profile nameplates with nylon push-in fasteners
- Wiremarkers, sleeve type
- Enclosure space heater with expanded metal cage, rated 240VAC, energized @ 120VAC



REFERENCE: Georgia, Kennedy and College St Substations

- Barrier behind the instrument compartment doors
- Textured powder coat paint finish
- ANSI-61, light gray exterior with white instrument panels

(1) Set of enclosure options:

- 1 Space heater circuit with MCCB supply disconnect, thermostat and bypass switch
- 2 Ground cable lugs (4/0)

(1) Set incoming line voltage monitoring equipment, each to include:

- Roll-out assembly complete with primary & secondary fuses
- 3 Voltage transformers, 8400:120 volt

(1) Set switchgear main bus voltage monitoring equipment, each to include:

- Roll-out assembly complete with primary & secondary fuses
- 3 Voltage transformers, 8400:120 volt

(1) TRANSFORMER (T1) MAIN circuit breaker equipment set, each to include:

- Circuit breaker cell rated 3000 ampere with closed door racking provision, viewing window, integral light and remote switch, riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
- Silver plated copper runback bus assembly rated 3000A with boots
- Epoxy bus standoff assembly
- 1 PowlVac drawout vacuum circuit breaker rated 15kV, 3000A, 25kA with closed door racking provision, 15PV25, with 3 "a" & 3 "b" contacts**
- Circuit breaker switch, MOC 13 circuit (7 a & 6 b)
- Circuit breaker switch, TOC 13 circuit (7 a & 6 b)
- Shutter position indicator
- Door provision for electrical racking device
- 1 Set close circuit disconnect fuse block with fuses
- 1 Set trip circuit disconnect fuse block with solid link
- 2 Set relay circuit disconnect fuse block with fuses
- 6 Current transformers, multi ratio, high burden
- 1 Control switch, open/close
- 3 Indicating lights LED type
- 1 Device 86, lockout relay LOR, 5 decks, 20 contacts
- 6 Test switch with rear wired connection and semi-flush mount, 10-pole (ABB required)
- 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)



REFERENCE: Georgia, Kennedy and College St Substations

- 1 ION 7650 Transducer (SQD# METSEION92040)
- 1 Shark® 100-60-10-V2-D2-485P-X
- 1 SEL 787 Transformer Protection Relay (07871X1ACACAA5850220, 787#GTKF)
- 1 INCON Tap position monitor 1250B-1-S
- 1 Beckwith Digital Tap changer Control (M-2001C-6SL)
- 1 SEL-487B with Conventional Secondary Inputs (0487B1X4X52XC0XEH9EEEEEX, 487B#PNKP)
- 3 Cable lugs, 500 MCM
- 3 Set cover boots
- 1 Lot nameplates

(6) FEEDER circuit breaker equipment sets, each to include:

- Circuit breaker cell rated 1200 ampere with closed door racking provision, viewing window, integral light and remote switch, riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
- Silver plated copper runback bus assembly rated 1200A with boots
- Epoxy bus standoff assembly
- 1 **PowlVac drawout vacuum circuit breaker rated 15kV, 1200A, 25kA with closed door racking provision, 15PV25, with 3 "a" & 3 "b" contacts**
- Circuit breaker switch, MOC 13 circuit (7 a & 6 b)
- Circuit breaker switch, TOC 13 circuit (7 a & 6 b)
- Shutter position indicator
- Door provision for electrical racking device
- 1 Molded Case Circuit Breaker disconnect, 125VDC, 2 pole
- 1 Set close circuit disconnect fuse block with fuses
- 1 Set trip circuit disconnect fuse block with solid link
- 3 Set relay circuit disconnect fuse block with fuses
- 6 Current transformers, multi ratio, high burden
- 1 Control switch, open/close
- 3 Indicating lights LED type
- 3 Test switch with rear wired connection and semi-flush mount, 10-pole (ABB required)
- 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)
- 1 Shark® 100-60-10-V2-D2-485P-X
- 3 Station Class Surge Arresters, 15 kV, polymer
- 3 Cable lugs, 750 MCM
- 3 Set cover boots
- 1 Lot nameplates



REFERENCE: Georgia, Kennedy and College St Substations

(1) TIE FEEDER circuit breaker equipment set, each to include:

- Circuit breaker cell rated 3000 ampere with closed door racking provision, viewing window, integral light and remote switch, riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
- Silver plated copper runback bus assembly rated 3000A with boots
- Epoxy bus standoff assembly
- 1 PowlVac drawout vacuum circuit breaker rated 15kV, 3000A, 25kA with closed door racking provision, 15PV25, with 3 "a" & 3 "b" contacts**
- Circuit breaker switch, MOC 13 circuit (7 a & 6 b)
- Circuit breaker switch, TOC 13 circuit (7 a & 6 b)
- Shutter position indicator
- Door provision for electrical racking device
- 1 Molded Case Circuit Breaker disconnect, 125VDC, 2 pole
- 1 Set close circuit disconnect fuse block with fuses
- 1 Set trip circuit disconnect fuse block with solid link
- 3 Set relay circuit disconnect fuse block with fuses
- 6 Current transformers, multi ratio, high burden
- 1 Control switch, open/close
- 3 Indicating lights LED type
- 2 Test switch with rear wired connection and semi-flush mount, 10-pole (ABB required)
- 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)
- 1 SEL-2407 satellite-synchronized clock (24070A03B, 2407#2FJD)
- 1 SEL-953 Coaxial Cable C953#0102
- 1 SEL-3350 Automation Controller (3350#1KP4)
- 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)
- 3 Station Class Surge Arresters, 15 kV, polymer
- 3 Cable lugs, 750 MCM
- 3 Set cover boots
- 1 Lot nameplates

(1) Arcteq Arc Quencher Systems, each to include:

- 1 Arc Quencher Protective Relay (AQ-110PLV - AQ-110PLV-AABA)
- 1 Arc Flash Sensor Relays (AQ-103 - AQ-103LV)
- 1 AQ System C50 Controller with Ethernet Communications (T4-PAC-C80)
- 1 AQ System 10" Color Touchscreen HMI (T4-PAC-HMI)
- 1 MV Arc Quencher Device with 3AM4 (SiQuench AQD - 3AM4132-1DA12-0AB2-Z)
- 1 Arc Flash Point Light Sensors (AQ-01 (PLS) - AQ-01C-XXX)
- 1 Arc Quencher Assertion Fiber Cables, 3 meter length (AX-001-3)



REFERENCE: Georgia, Kennedy and College St Substations

- 1 Safety+ Annunciator Panel 22mmPL + Siren (T4AQSAP)
- 1 Nexus 1500+ Time-Date SOE Recorder & Power Meter (1500+-D-60-20-V1-X-X-6R01-X)
- 1 RJ-45 External Port (2866763)
- 1 Phoenix Quint Power Supplies (492075)
- 1 Lot nameplates

(1) Set of switchgear accessories to include:

- 1 Manual charging handle
- 1 Circuit breaker racking handle
- 1 Interlock override
- 1 Circuit breaker test cabinet with secondary disconnect plug
- 1 Electrically operated racking device
- 1 Circuit breaker lift truck
- 6 SEL-2814M0 (Configuration# 2814M0)
- 12 SEL-2812 (configuration# 2812MRX0)
- 12 SEL-2812 (configuration# 2812MTX0)
- 12 SEL Multimode Fiber-Optic Cable, (C808Z01000X0002, C808#F7JN)



REFERENCE: Georgia, Kennedy and College St Substations

Power Control Room

Tag Number: GEORGIA STREET T3 PCR

One (1) Powell PCR®, Power Control Room suitable for installation in an unclassified area with approximate exterior dimensions of:

15' 0" Wide with 6" wall thickness	Low ambient temperature: 0°F
33' 0" Long with 6" wall thickness	High ambient temperature: 104°F
11' 0" High less base and roof cap (interior height)	Altitude: 0 FT. above sea level

Estimated shipping dimensions and weight:

15' 9" Wide including 4.5" overhang on each side	Roof live load: 20 PSF
33' 0" Long with no overhang on each end	Floor live load: 150 PSF
13' 7" High including base and roof cap (approximate)	Basic wind speed: 135 MPH
Estimated weight including equipment: 58,003 LBS	

Structural Base:

- Welded channel construction, skid type, with structural supports and removable lifting lugs
- Steel floor, 1/4" thick with non-skid paint.
- 17 Floor penetrations, with surface mounted covers

Metal Preparation and Paint Finish:

- The welded base assembly is grit blasted to comply with the Commercial Blast Standard SSPC-6 as published by AISC.
- After blast, a primer is applied to the entire base using an industrial grade, high solid, and high build epoxy. The primer is applied to a minimum thickness of 4 mils.
- The structural elements of the base including all channels and angles are caulked to seal gaps and spaces that might allow moisture to collect.
- A second application of industrial grade, high solid, high-build epoxy is applied to the bottom of the base assembly. This application is BLACK in color and is applied to a minimum thickness of 4 mils.
- The sides of the base are finished using a black polyurethane paint with a minimum thickness of 2 mils.
- Total dry film thickness after coating:
 - For the top of the floor is 6 mils minimum
 - For the sides of the base is 6 mils minimum
 - For the bottom of the base is 8 mils minimum



REFERENCE: Georgia, Kennedy and College St Substations

- Exterior interlocking panels, will be White (ANSI 01) per Powell Application Procedure. All interlocking panels and interior wall liners are pre-painted prior to assembly. An all-weather sealant is applied to all seams.

Exterior Wall, Interior Wall, Ceiling, and Roof Panels:

- Exterior walls and roof to be constructed of interlocking Powell, Pow-R-Loc panels. The design as a minimum, is to meet wind load requirements of FBC 2023
- Wall panels of 18 gauge galvanized steel painted Gray (ANSI 61) (Textured)
- Roof panels of 18 gauge galvanized steel painted White (ANSI 01) (Smooth)
- Interior wall liner panels 16 gauge galvanized steel painted White (ANSI 01) (Smooth)
- Interior ceiling panels 14 gauge galvanized steel with integral Powl Strut System painted White (ANSI 01) (Smooth)
- Roof will have a slope of 1/4 inches per foot minimum
- 80 Linear feet of Painted Aluminum Gutter with Downspouts to Grade

Insulation for Base, Walls and Roof:

- Polyurethane spray on foam (2" R-13.4), meets ASTM E84 Flame Spread Test
- 6" code compliant wall with effective R-18.3 continuous insulation
- Code compliant roof with effective R-35.6 continuous insulation

Doors and Hardware:

- 2 Sets of aluminum panic door hardware, with door closer & key lock
- 2 Equipment door, single wide, 4' x 9', Painted Galv Steel, with 12" X 12" viewing window
- 8 Painted galvanized equipment rear access doors without split
- 2 Rain canopies over SINGLE wide equipment doors (Alu.)
- 25 Linear feet of drip shield over rear access doors (Alu.)

The PCR® will include the following accessory items:

- 1 AC Panel 208/120VAC, 3 Phase, 4 Wire, 250A Main Bus, 42ckt with 150A Main Breaker, 22kAIC
- 1 Building services transformer, 480-120/208 volt 3 phase 45 kVA, Type DOE2016, Copper windings, 150 degree C rise
- 1 Lot of Interior Vapor Tight LED lighting fixtures
- 2 Interior LED lighting fixtures, with a minimum 90 minutes emergency battery backup
- 2 Light switches



REFERENCE: Georgia, Kennedy and College St Substations

- 4 Convenience receptacles
- 2 Exterior GFCI receptacles
- 2 Exit & Emergency Light Combo with dual LED lamps, 120/277 VAC
- 1 Lot of EMT conduit and wireway for interior and RGS for exterior building services
- 1 Lot of THHN/THWN wiring for utility lights, receptacles and space heater circuits

Equipment Power and Control Wiring and Interconnections:

- 45 Feet of cable tray 6" wide x 4" deep galvanized with covers
- 80 Feet of cable tray 24" wide x 4" deep Aluminum
- 1 Cable tray tees 4" deep 24" wide
- 4 Cable tray elbows 4" deep 24" wide
- PCR Power wiring limited to 218 Terminations
- PCR Control wiring limited to 8 Terminations
- PCR Instrumentation wiring limited to 60 Terminations
- PCR Communication wiring limited to 10 Terminations

Grounding System:

- 110 Linear feet of bare Copper ground bus 1/4" x 2"
- 4 Copper ground pads on diagonal corners of building frame
- 10 Interconnection from each equipment ground bus to building frame
- 2 Interconnection from each equipment ground bus to building ground loop

Exterior Devices:

- 2 General Purpose exterior light, LED Wall Pack, 70W Metal Halide Equivalent

UPS and DC System Components:

- 1 Battery exhaust fan and duct assembly
- 1 Hydrogen Gas Detector Powell standard
- 1 Eye Wash & Bowl
- 1 Mechanical installation of a Stackable 125 VDC Battery System
- 1 Furnished and install Safety Disconnect Switch, Non-Fusible, 2-Pole, NEMA 1, 100A



REFERENCE: Georgia, Kennedy and College St Substations

Standard HVAC System:

- 1 Building HVAC system for a non-classified area, to include:
- 2 3-Ton Wall mounted HVAC with 6.8kW electric heat unit, 208-230V, 3-phase, 60Hz to include:
 - BARD 11.0 EER HVAC part no. W36AF-B09XXAXXJ
 - Aluminum air conditioner cabinet
 - Low Ambient control with Barometric Damper for compressor operation down to 0° Fahrenheit
 - Compressor control module located on the Back side, adjustable from 30 seconds to 5 minutes
 - Phase rotation monitor
 - High and Low pressure switches with built-in auto-reset
 - Factory installed internal disconnect MCCB, padlockable
 - MERV2 1-in disposable air filter
 - Dry contracts for remote alarm or lockout
 - Auto changeover digital thermostat
 - ANSI/UL STD 60335-1 & 60335-2-40/CSA STD C22.2 #60335-1 & #60335-2-40

HVAC Accessories:

- 1 Lead lag controller, 2 units, MC4002
- 1 High temperature alarm
- 2 Safety Disconnect Switch, Non-Fusible, 3-Pole, NEMA 3R, installed on wall mounted HVAC

Mechanical Equipment Installation:

- 1 Lot of installation of Powell furnished equipment to include:
 - 8 Sections of Medium Voltage Switchgear
 - 1 Mechanical installation of a circuit breaker test cabinet
 - 2 Wall Mounted HVAC Unit(s)
 - 1 Wall Mounted NEMA 1 Enclosure with Annunciator SEL 2533012130XA2X0 (2533#PGBF)
 - 1 Wall Mounted fold-away workbench, 28"D x 48" Long, made of polyethylene, 300LBs work surface capacity



REFERENCE: Georgia, Kennedy and College St Substations

Miscellaneous:

- 1 Installation Chatsworth Fiber optic rack (Chatsworth 55053-103)
- 2 Door Limit Switch contact alarms (Honeywell DTE6-2RN2)
- 1 Class D Halotron 11 lb. Fire Extinguisher (Kidde 4XP83)
- 1 Lot of Internal device nameplates if required
- 1 Structural Analysis by Professional Engineer for the State of Florida to confirm PCR design and structural integrity per FBC 2023
- 1 State of Florida code compliance licensing fee
- Powell's PCR design shall be guided by FBC 2023 and FBCEC 2023
- Equipment clearance and egress proposed are based on the NEC 2020


REFERENCE: Georgia, Kennedy and College St Substations

Fire Detection System
Georgia Street T3

The building is protected by a conventional fire alarm system. Building fire alarm control panel will power and monitor all of the fire detection devices and operate the fire detection audible and visual devices for the building. We have relays in the fire alarm panel for tie in by others to shut down the HVAC units upon an alarm condition and notify the customer of alarm and trouble conditions.

Georgia Street T3 PCR Building Dimensions: 33' x 15' x 11'
(There is no suspended ceiling or raised floor in the building)

Qty	Manufacturer	Description
1	Fire-Lite	MS4 Conventional Fire Alarm Panel
2	Powersonic	PS1270 Battery 12 volt 7 amp.hr.
2	Fire-Lite	Photoelectric Detector with Base
2	Fire-Lite	Manual Pull Station
1	Fire-Lite	Alarm Horn Strobe
1	Fire-Lite	HVAC Controller Relay
2	Fire-Lite	Client Relay for SCADA Tie In By Others
1 lot	Advantage	Installation Labor and Materials

SCOPE OF WORK
1. General.

- 1.1. Provide shop drawings, calculations, and submittal literature.
- 1.2. Provide "as-built" drawings and "Operation & Maintenance Manuals" subsequent to the completion of the installation.
- 1.3. Testing in the presence of the Authority Having Jurisdiction at the Powell facility in Houston, Texas.
- 1.4. Provide labor and materials for the installation of all Advantage Interests supplied equipment.

2. Conventional Fire Detection Systems.

- 2.1. Provide new fire detection equipment for Powell RFQ 261652 dated 10-29-24, subsequent emails and phone conversations.
- 2.2. Provide photoelectric detectors, manual pull stations, audible visual devices, fire detection control panels, and associated hardware to complete the installation of the conventional fire detection systems.



REFERENCE: Georgia, Kennedy and College St Substations

Battery

(1) DC PowerCab – Part No. 4BG8220NTBAC00 to include:

DC PowerCab

4: Cabinet Type: NEMA 1, indoor, steel construction, 30.5W x 31.5D x 79H

B: Number of Cabinets: 1 cabinet, key lock main door, finger turn latch access to breakers, field selectable bottom/top cable entry

G: Cabinet Finish: ANSI 61 gray finish

8: DC Output Voltage: 120

1: Number of Battery Strings: 1 String

10: Battery Capacity: 100AH (nominal)

Battery: 96AH; one 96Ah battery string

DEKA Unigy I, 12AVR100ET or similar

10 year design life.

Flame Retardant, UL94-VO/L.O.I. 28%

Total Electrolyte Volume: 13.5 gallons

Short Circuit Current: 3,070 amps

Hydrogen Evolution: See the attached Battery Ventilation Requirements

Weights and Dimensions: See the attached Rack Drawing and Info.pdf

N: Output Current: 16 Amps, 20 Amp Breaker (charger to panelboard)

T: Input Voltage: 115-120/208/230-240 V, 60 Hz, single phase

B: Feature Package: Eliminator Plus package: Eliminator + reverse polarity diode, blocking diode

A: Alarms and Communication: Summary Form C alarm (30V/2A)

C: DC Load Center: Internal Panel, 100A 2-pole Battery Main, 2-pole Charger Feed + 12 2-pole DC breaker positions

0: Low Voltage Load Disconnect: None

0: Inverter: None

10 year design life

1 cabinet(s), each: 30.5 in (W) x 31.5 in (D) x 79 in (H)

DC circuit breakers are ordered as a separate line item and are not indicated within the PowerCab part number.

PLEASE NOTE THAT THIS POWERCAB MAY BE BROKEN APART INTO MULTIPLE LINE ITEMS ON THE CUSTOMER ORDER CONFIRMATION AND/OR THE INVOICE



REFERENCE: Georgia, Kennedy and College St Substations

This PowerCab includes the charger: Q120016TL514A

EnerGenius IQ

120: DC Output Voltage: 120 VDC

16: Output Current: 16 ADC

T: AC Input Voltage: 115-120/208/230-240 V, 60 Hz, single phase

L: Agency Marks: C-UL 1012 listed (60 Hz units)

514: Feature Package: Standard breaker, standard filter plus lower ripple filter, reverse polarity diode, blocking diode

120 V Eliminator Output Filtering: 30 mV ripple filter with battery or 100 mV without battery

10 kAIC Input Breaker

A: Alarms/Communication: Summary Form C alarm (30V/2A)

Summary-LCD display with one (1) programmable summary form C contact to alarm on issues such as AC Fail, charger fail, low DC voltage, high DC voltage, ground fault positive or negative, battery check fail

Mounting/Additional Features: Wall mount

Output Breaker Rating is 10 kAIC

SENS EnerGenius® IQ2 Filtered battery charger, fully automatic

Dual microprocessor controlled

Front panel user interface

Digital amp and volt meters

On-board battery checking

Load Share Capable; load kit cable quoted separately

AC and DC breakers

UL/C-UL listed

Seismic certified to IBC 2006-2021 to an Sds value of 2.50g

19.4 in (W) x 13.0 in (D) x 17.6 in (H), 186 lbs

Estimated Weight: 1,475 lbs.

UL/cUL Listed

Heat Loss for the charger: 246 watts

(12) Part Number BP-GHB2020 to include:

20A, Two Pole DC Breaker for the DC Distribution Panel in the above PowerCab.

Breaker capacities from 15A to 60A are also available at the same price per breaker. Up to 12 breakers can be used in the DC distribution panel in the PowerCab.

Number of circuits or breaker capacity were not specified; the quantity quoted here provides one distribution breaker per switchgear breaker, plus two spare breakers.



REFERENCE: Georgia, Kennedy and College St Substations

The breaker ampacity was not provided; the customer is responsible for verifying that the breakers are correct for the application.

Estimated Shipping and Handling Charges - Shipping and handling – PowerCab system as quoted above

Shipping and handling Estimated to Houston, TX 77061 via standard ground transportation.

This freight estimate assumes no options such as a tailgate lift is required on site.

This freight estimate is included to provide an approximate freight cost to the customer.

Our freight terms are FCA factory. SENS will pre-pay freight charges and add them to the customer's invoice upon request. The amount invoiced will be based on the actual freight charges.



REFERENCE: Georgia, Kennedy and College St Substations

Stairs and Landings

Tag Number: T3 SWGR - GEORGIA ST.

- (1) Lot Stairs, Platforms, and Removable Handrails to include:
Approx. Weight 3,578 lbs. per Stair & Platform**

Platform Sizes (shipping sections) are as follows:

- Two (2) 6'L x 6'W Platforms.
- Two (2) Stairways approx. 3' 4"L x 3'W x 8"H. Top of Stairs to be 15" above grade.

P.E. Structural Load Calcs./ Stamped Dwgs for the State of Florida.

- Review to be done after Grimes dwgs are approved for construction

All Stairs & Platforms listed below will be built per IBC & the following:

- All platform perimeters shall be of A-36 C10 x 15.3# w/ C6 x 8.2# channel cross members & 2" x 1/4" angle grating support.
- All platforms to have 19-W-4 1-1/4" x 3/16" serrated bar grating walking surface.
- 1-1/2" Sch. 40 removable pipe Railing with 3" x 3/8" Flat Bar uprights.
- Additional 1-1/2" Sch. 40 pipe stairway handrail at 36" above nosing of stair treads on both sides of stairway.
- 4" x 1/4" Flat bar toe plates around all platform perimeters.
- Platform support columns to be of HSS 3" x 3" x 1/4" w/ 7" x 7" x 3/8" top & 8" x 8" x 3/8" bottom plates.
- Stair stringers to be of A-36 C8 x 11.5# Channel with 19-W-4 1-1/4" x 3/16" serrated bar grating welded treads w/checkered nosing.
- All components to be ASTM A123 Spec. Hot Dip Galvanized (post assembly) unpainted.
- Approval drawings will be 2-3 weeks after receipt of Customer approved PDC Plan View & Elevation Dwgs.
- Platforms will have location designation welded on platforms as required.
- Anchoring design and hardware by others, all other hardware is included in price.



REFERENCE: Georgia, Kennedy and College St Substations

13.2kV Metal Clad Switchgear

Tag Number: T3 SWGR - GEORGIA ST.

One (1) line-up of PowlVac® metal clad switchgear with vacuum circuit breakers designed in accordance with ANSI standards C37.04, C37.06, C37.20.2, and rated as follows:

Maximum Voltage Class:	15 kV
Service Voltage:	13.2 kV
Basic Impulse Level:	95 kV
Power Frequency Withstand:	36 kV
Voltage Range (K factor):	1
Short-circuit Current Rating:	25 kA rms
Close and Latch Capacity:	65 kA Peak
Close Voltage:	125 VDC
Trip Voltage:	125 VDC
Frequency:	60 Hz

(8) Vertical sections of metal clad switchgear each with the following common features:

- Indoor enclosure, NEMA 1, 11 gauge steel
- Basic one high construction including a standard rear access door as an integral part of the PCR®
- Laminated plastic mimic bus
- 3000A main bus, silver plated copper, 3 phase, 3 wire
- Flame retardant and track resistant Bonded Epoxy bus insulation system
- Epoxy main bus pass through insulators in a glass polyester mounting
- Carbon steel Grade 5 mounting hardware, plated for corrosion protection
- Phase polarity 1 2 3 or A B C, front to back, top to bottom, left to right
- Ground bus, 1/4 x 2, copper with plating to match main bus
- Control terminal blocks, 600 volt, 30 ampere
- Control wiring, 14 gauge, 41 strand, type SIS with VW-1 flame retardant rating
- Control wire termination, insulated, locking fork/spade tongue, crimp type
- Current transformer shorting type terminal blocks
- Current transformer wiring, 10 gauge, 105 strand, type SIS with VW-1 flame retardant rating
- Current transformer wire termination, insulated, ring tongue, crimp type
- Wire harnesses
- Common DC bus #8 AWG SIS wire with seamless ring tongue terminations
- Raised profile nameplates with nylon push-in fasteners
- Wiremarkers, sleeve type
- Enclosure space heater with expanded metal cage, rated 240VAC, energized @ 120VAC



REFERENCE: Georgia, Kennedy and College St Substations

- Barrier behind the instrument compartment doors
- Textured powder coat paint finish
- ANSI-61, light gray exterior with white instrument panels

(1) Set of enclosure options:

- 1 Space heater circuit with MCCB supply disconnect, thermostat and bypass switch
- 2 Ground cable lugs (4/0)

(1) Set incoming line voltage monitoring equipment, each to include:

- Roll-out assembly complete with primary & secondary fuses
- 3 Voltage transformers, 8400:120 volt

(1) Set switchgear main bus voltage monitoring equipment, each to include:

- Roll-out assembly complete with primary & secondary fuses
- 3 Voltage transformers, 8400:120 volt

(1) MAIN circuit breaker equipment set, each to include:

- Circuit breaker cell rated 3000 ampere with closed door racking provision, viewing window, integral light and remote switch, riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
- Silver plated copper runback bus assembly rated 3000A with boots
- Epoxy bus standoff assembly
- 1 PowlVac drawout vacuum circuit breaker rated 15kV, 3000A, 25kA with closed door racking provision, 15PV25, with 3 "a" & 3 "b" contacts**
- Circuit breaker switch, MOC 13 circuit (7 a & 6 b)
- Circuit breaker switch, TOC 13 circuit (7 a & 6 b)
- Shutter position indicator
- Door provision for electrical racking device
- 1 Set close circuit disconnect fuse block with fuses
- 1 Set trip circuit disconnect fuse block with solid link
- 2 Set relay circuit disconnect fuse block with fuses
- 6 Current transformers, multi ratio, high burden
- 1 Control switch, open/close
- 3 Indicating lights LED type
- 1 Device 86, lockout relay LOR, 5 decks, 20 contacts
- 6 Test switch with rear wired connection and semi-flush mount, 10-pole (ABB required)
- 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)



REFERENCE: Georgia, Kennedy and College St Substations

- 1 ION 7650 Transducer (SQD# METSEION92040)
- 1 Shark® 100-60-10-V2-D2-485P-X
- 1 SEL 787 Transformer Protection Relay (07871X1ACACAA5850220, 787#GTKF)
- 1 INCON Tap position monitor 1250B-1-S
- 1 Beckwith Digital Tap changer Control (M-2001c-6SL)
- 1 SEL-487B with Conventional Secondary Inputs (0487B1X4X52XC0XEH9EEEEEX, 487B#PNKP)
- 3 Cable lugs, 500 MCM
- 3 Set cover boots
- 1 Lot nameplates

(5) FEEDER circuit breaker equipment sets, each to include:

- Circuit breaker cell rated 1200 ampere with closed door racking provision, viewing window, integral light and remote switch, riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
- Silver plated copper runback bus assembly rated 1200A with boots
- Epoxy bus standoff assembly
- 1 **PowlVac drawout vacuum circuit breaker rated 15kV, 1200A, 25kA with closed door racking provision, 15PV25, with 3 "a" & 3 "b" contacts**
- Circuit breaker switch, MOC 13 circuit (7 a & 6 b)
- Circuit breaker switch, TOC 13 circuit (7 a & 6 b)
- Shutter position indicator
- Door provision for electrical racking device
- 1 Molded Case Circuit Breaker disconnect, 125VDC, 2 pole
- 1 Set close circuit disconnect fuse block with fuses
- 1 Set trip circuit disconnect fuse block with solid link
- 3 Set relay circuit disconnect fuse block with fuses
- 6 Current transformers, multi ratio, high burden
- 1 Control switch, open/close
- 3 Indicating lights LED type
- 3 Test switch with rear wired connection and semi-flush mount, 10-pole (ABB required)
- 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)
- 1 Shark® 100-60-10-V2-D2-485P-X
- 3 Station Class Surge Arresters, 15 kV, polymer
- 3 Cable lugs, 750 MCM
- 3 Set cover boots
- 1 Lot nameplates



REFERENCE: Georgia, Kennedy and College St Substations

(2) TIE FEEDER circuit breaker equipment sets, each to include:

- Circuit breaker cell rated 3000 ampere with closed door racking provision, viewing window, integral light and remote switch, riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
- Silver plated copper runback bus assembly rated 3000A with boots
- Epoxy bus standoff assembly
- 1 PowlVac drawout vacuum circuit breaker rated 15kV, 3000A, 25kA with closed door racking provision, 15PV25, with 3 "a" & 3 "b" contacts**
- Circuit breaker switch, MOC 13 circuit (7 a & 6 b)
- Circuit breaker switch, TOC 13 circuit (7 a & 6 b)
- Shutter position indicator
- Door provision for electrical racking device
- 1 Molded Case Circuit Breaker disconnect, 125VDC, 2 pole
- 1 Set close circuit disconnect fuse block with fuses
- 1 Set trip circuit disconnect fuse block with solid link
- 3 Set relay circuit disconnect fuse block with fuses
- 6 Current transformers, multi ratio, high burden
- 1 Control switch, open/close
- 3 Indicating lights LED type
- 2 Test switch with rear wired connection and semi-flush mount, 10-pole (ABB required)
- 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)
- 1 SEL-2407 satellite-synchronized clock (24070A03B, 2407#2FJD)
- 1 SEL-953 Coaxial Cable C953#0102
- 1 SEL-3350 Automation Controller (3350#1KP4)
- 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)
- 3 Station Class Surge Arresters, 15 kV, polymer
- 3 Cable lugs, 750 MCM
- 3 Set cover boots
- 1 Lot nameplates

(1) Arcteq Arc Quencher Systems, each to include:

- 1 Arc Quencher Protective Relay (AQ-110PLV - AQ-110PLV-AABA)
- 1 Arc Flash Sensor Relays (AQ-103 - AQ-103LV)
- 1 AQ System C50 Controller with Ethernet Communications (T4-PAC-C80)
- 14 AQ System 10" Color Touchscreen HMI (T4-PAC-HMI)
- 1 MV Arc Quencher Device with 3AM4 (SiQuench AQD - 3AM4132-1DA12-0AB2-Z)
- 2 Arc Flash Point Light Sensors (AQ-01 (PLS) - AQ-01C-XXX)
- 1 Arc Quencher Assertion Fiber Cables, 3 meter length (AX-001-3)



REFERENCE: Georgia, Kennedy and College St Substations

- 1 Safety+ Annunciator Panel 22mmPL + Siren (T4AQSAP)
- 1 Nexus 1500+ Time-Date SOE Recorder & Power Meter (1500+-D-60-20-V1-X-X-6R01-X)
- 1 RJ-45 External Port (2866763)
- 1 Phoenix Quint Power Supplies (492075)
- 1 Lot nameplates

(1) Set of switchgear accessories to include:

- 1 Manual charging handle
- 1 Circuit breaker racking handle
- 1 Interlock override
- 1 Circuit breaker test cabinet with secondary disconnect plug
- 1 Electrically operated racking device
- 1 Circuit breaker lift truck
- 6 SEL-2814M0 (configuration# 2814M0)
- 12 SEL-2812 (configuration# 2812MRX0)
- 12 SEL-2812 (configuration# 2812MTX0)
- 12 SEL Multimode Fiber-Optic Cable, (C808Z01000X0002, C808#F7JN)



REFERENCE: Georgia, Kennedy and College St Substations

Power Control Room

Tag Number: GEORGIA STREET WEST PCR

One (1) Powell PCR®, Power Control Room suitable for installation in an unclassified area with approximate exterior dimensions of:

15' 0" Wide with 6" wall thickness	Low ambient temperature: 39°F
30' 0" Long with 6" wall thickness	High ambient temperature: 93°F
11' 0" High less base and roof cap (interior height)	Altitude: 36 FT. above sea level

Estimated shipping dimensions and weight:

15' 9" Wide including 4.5" overhang on each side	Roof live load: 20 PSF
30' 0" Long with no overhang on each end	Floor live load: 150 PSF
13' 7" High including base and roof cap (approximate)	Basic wind speed: 135 MPH
Estimated weight including equipment: 52,422 LBS	

Structural Base:

- Welded channel construction, skid type, with structural supports and removable lifting lugs
- Steel floor, 1/4" thick with non-skid paint.
- 15 Floor penetrations, with surface mounted covers

Metal Preparation and Paint Finish:

- The welded base assembly is grit blasted to comply with the Commercial Blast Standard SSPC-6 as published by AISC.
- After blast, a primer is applied to the entire base using an industrial grade, high solid, and high build epoxy. The primer is applied to a minimum thickness of 4 mils.
- The structural elements of the base including all channels and angles are caulked to seal gaps and spaces that might allow moisture to collect.
- A second application of industrial grade, high solid, high-build epoxy is applied to the bottom of the base assembly. This application is BLACK in color and is applied to a minimum thickness of 4 mils.
- The sides of the base are finished using a black polyurethane paint with a minimum thickness of 2 mils.
- Total dry film thickness after coating:
 - For the top of the floor is 6 mils minimum
 - For the sides of the base is 6 mils minimum
 - For the bottom of the base is 8 mils minimum



REFERENCE: Georgia, Kennedy and College St Substations

- Exterior interlocking panels, will be White (ANSI 01) per Powell Application Procedure. All interlocking panels and interior wall liners are pre-painted prior to assembly. An all-weather sealant is applied to all seams.

Exterior Wall, Interior Wall, Ceiling, and Roof Panels:

- Exterior walls and roof to be constructed of interlocking Powell, Pow-R-Loc panels. The design as a minimum, is to meet wind load requirements of FBC 2023
- Wall panels of 18 gauge galvanized steel painted Gray (ANSI 61) (Textured)
- Roof panels of 18 gauge galvanized steel painted White (ANSI 01) (Smooth)
- Interior wall liner panels 16 gauge galvanized steel painted White (ANSI 01) (Smooth)
- Interior ceiling panels 14 gauge galvanized steel with integral Powl Strut System painted White (ANSI 01) (Smooth)
- Roof will have a slope of 1/4 inches per foot minimum
- 70 Linear feet of Painted Aluminum Gutter with Downspouts to Grade

Insulation for Base, Walls and Roof:

- Polyurethane spray on foam (2" R-13.4), meets ASTM E84 Flame Spread Test
- 6" code compliant wall with effective R-18.3 continuous insulation
- Code compliant roof with effective R-35.6 continuous insulation

Doors and Hardware:

- 2 Sets of aluminum panic door hardware, with door closer & key lock
- 2 Equipment door, single wide, 4' x 9', Painted Galv Steel, with 12" X 12" viewing window
- 7 Painted galvanized equipment rear access doors without split
- 2 Rain canopies over SINGLE wide equipment doors (Alu.)
- 22 Linear feet of drip shield over rear access doors (Alu.)

The PCR® will include the following accessory items:

- 1 AC Panel 208/120VAC, 3 Phase, 4 Wire, 250A Main Bus, 42ckt with 150A Main Breaker, 22kAIC
- 1 Building services transformer, 480-120/208 volt 3 phase 45 kVA, Type DOE2016, Copper windings, 150 degree C rise
- 1 Lot of Interior Vapor Tight LED lighting fixtures
- 2 Interior LED lighting fixtures, with a minimum 90 minutes emergency battery backup
- 2 Light switches



REFERENCE: Georgia, Kennedy and College St Substations

- 4 Convenience receptacles
- 2 Exterior GFCI receptacles
- 2 Exit & Emergency Light Combo with dual LED lamps, 120/277 VAC
- 1 Lot of EMT conduit and wireway for interior and RGS for exterior building services
- 1 Lot of THHN/THWN wiring for utility lights, receptacles and space heater circuits

Equipment Power and Control Wiring and Interconnections:

- 42 Feet of cable tray 6" wide x 4" deep galvanized with covers
- 80 Feet of cable tray 24" wide x 4" deep Aluminum
- 1 Cable tray tees 4" deep 24" wide
- 4 Cable tray elbows 4" deep 24" wide
- PCR Power wiring limited to 218 Terminations
- PCR Control wiring limited to 8 Terminations
- PCR Instrumentation wiring limited to 60 Terminations
- PCR Communication wiring limited to 10 Terminations

Grounding System:

- 110 Linear feet of bare Copper ground bus 1/4" x 2"
- 4 Copper ground pads on diagonal corners of building frame
- 10 Interconnection from each equipment ground bus to building frame
- 2 Interconnection from each equipment ground bus to building ground loop

Exterior Devices:

- 2 General Purpose exterior light, LED Wall Pack with Photocell, 100W Metal Halide Equivalent

UPS and DC System Components:

- 1 Battery exhaust fan and duct assembly
- 1 Hydrogen Gas Detector Powell standard
- 1 Eye Wash & Bowl
- 1 Mechanical installation of a Stackable 125 VDC Battery System
- 1 Furnish and install Safety Disconnect Switch, Non-Fusible, 2-Pole, NEMA 1, 100A



REFERENCE: Georgia, Kennedy and College St Substations

Standard HVAC System:

- 1 Building HVAC system for a non-classified area, to include:
- 2 3-Ton Wall mounted HVAC with 6.8kW electric heat unit, 208-230V, 3-phase, 60Hz to include:
 - BARD 11.0 EER HVAC part no. W36AF-B09XXAXXJ
 - Aluminum air conditioner cabinet
 - Low Ambient control with Barometric Damper for compressor operation down to 0° Fahrenheit
 - Compressor control module located on the Back side, adjustable from 30 seconds to 5 minutes
 - Phase rotation monitor
 - High and Low pressure switches with built-in auto-reset
 - Factory installed internal disconnect MCCB, padlockable
 - MERV2 1-in disposable air filter
 - Dry contracts for remote alarm or lockout
 - Auto changeover digital thermostat
 - ANSI/UL STD 60335-1 & 60335-2-40/CSA STD C22.2 #60335-1 & #60335-2-40

HVAC Accessories:

- 1 Lead lag controller, 2 units, MC4002
- 1 High temperature alarm
- 2 Safety Disconnect Switch, Non-Fusible, 3-Pole, NEMA 3R, installed on wall mounted HVAC

Mechanical Equipment Installation:

- 1 Lot of installation of Powell furnished equipment to include:
 - 7 Sections of Medium Voltage Switchgear
 - 1 Mechanical installation of a circuit breaker test cabinet
 - 2 Wall Mounted HVAC Unit(s)
 - 1 Wall Mounted NEMA 1 Enclosure with Annunciator SEL 2533012130XA2X0 (2533#PGBF)
 - 1 Wall Mounted fold-away workbench, 28"D x 48" Long, made of polyethylene, 300LBs work surface capacity



REFERENCE: Georgia, Kennedy and College St Substations

Miscellaneous:

- 1 Installation Chatsworth Fiber optic rack (Chatsworth 55053-103)
- 2 Door Limit Switch contact alarms (Honeywell DTE6-2RN2)
- 1 Class D Halotron 11 lb. Fire Extinguisher (Kidde 4XP83)
- 1 Lot of Internal device nameplates if required
- 1 Structural Analysis by Professional Engineer for the State of Florida to confirm PCR design and structural integrity per FBC 2023
- 1 State of Florida code compliance licensing fee
- Powell's PCR design shall be guided by FBC 2023 and FBCEC 2023
- Equipment clearance and egress proposed are based on the NEC 2020


REFERENCE: Georgia, Kennedy and College St Substations

Fire Detection System
Georgia Street West

The building is protected by a conventional fire alarm system. Building fire alarm control panel will power and monitor all of the fire detection devices and operate the fire detection audible and visual devices for the building. We have relays in the fire alarm panel for tie in by others to shut down the HVAC units upon an alarm condition and notify the customer of alarm and trouble conditions.

Georgia Street West PCR Building Dimensions: 30' x 15' x 11'
(There is no suspended ceiling or raised floor in the building)

Qty	Manufacturer	Description
1	Fire-Lite	MS4 Conventional Fire Alarm Panel
2	Powersonic	PS1270 Battery 12 volt 7 amp.hr.
2	Fire-Lite	Photoelectric Detector with Base
2	Fire-Lite	Manual Pull Station
1	Fire-Lite	Alarm Horn Strobe
1	Fire-Lite	HVAC Controller Relay
2	Fire-Lite	Client Relay for SCADA Tie In By Others
1 lot	Advantage	Installation Labor and Materials

SCOPE OF WORK
1. General.

- 1.1. Provide shop drawings, calculations, and submittal literature.
- 1.2. Provide "as-built" drawings and "Operation & Maintenance Manuals" subsequent to the completion of the installation.
- 1.3. Testing in the presence of the Authority Having Jurisdiction at the Powell facility in Houston, Texas.
- 1.4. Provide labor and materials for the installation of all Advantage Interests supplied equipment.

2. Conventional Fire Detection Systems.

- 2.1. Provide new fire detection equipment for Powell RFQ 261652 dated 10-29-24, subsequent emails and phone conversations.
- 2.2. Provide photoelectric detectors, manual pull stations, audible visual devices, fire detection control panels, and associated hardware to complete the installation of the conventional fire detection systems.



REFERENCE: Georgia, Kennedy and College St Substations

Battery

(1) DC PowerCab – Part No. 4BG8220NTBAC00 to include:

DC PowerCab

4: Cabinet Type: NEMA 1, indoor, steel construction, 30.5W x 31.5D x 79H

B: Number of Cabinets: 1 cabinet, key lock main door, finger turn latch access to breakers, field selectable bottom/top cable entry

G: Cabinet Finish: ANSI 61 gray finish

8: DC Output Voltage: 120

1: Number of Battery Strings: 1 String

10: Battery Capacity: 100AH (nominal)

Battery: 96AH; one 96Ah battery string

DEKA Unigy I, 12AVR100ET or similar

10 year design life.

Flame Retardant, UL94-VO/L.O.I. 28%

Total Electrolyte Volume: 13.5 gallons

Short Circuit Current: 3,070 amps

Hydrogen Evolution: See the attached Battery Ventilation Requirements

Weights and Dimensions: See the attached Rack Drawing and Info.pdf

N: Output Current: 16 Amps, 20 Amp Breaker (charger to panelboard)

T: Input Voltage: 115-120/208/230-240 V, 60 Hz, single phase

B: Feature Package: Eliminator Plus package: Eliminator + reverse polarity diode, blocking diode

A: Alarms and Communication: Summary Form C alarm (30V/2A)

C: DC Load Center: Internal Panel, 100A 2-pole Battery Main, 2-pole Charger Feed + 12 2-pole DC breaker positions

0: Low Voltage Load Disconnect: None

0: Inverter: None

10 year design life

1 cabinet(s), each: 30.5 in (W) x 31.5 in (D) x 79 in (H)

DC circuit breakers are ordered as a separate line item and are not indicated within the PowerCab part number.

PLEASE NOTE THAT THIS POWERCAB MAY BE BROKEN APART INTO
MULTIPLE LINE ITEMS ON THE CUSTOMER ORDER CONFIRMATION AND/OR
THE INVOICE



REFERENCE: Georgia, Kennedy and College St Substations

This PowerCab includes the charger: Q120016TL514A

EnerGenius IQ

120: DC Output Voltage: 120 VDC

16: Output Current: 16 ADC

T: AC Input Voltage: 115-120/208/230-240 V, 60 Hz, single phase

L: Agency Marks: C-UL 1012 listed (60 Hz units)

514: Feature Package: Standard breaker, standard filter plus lower ripple filter, reverse polarity diode, blocking diode

120 V Eliminator Output Filtering: 30 mV ripple filter with battery or 100 mV without battery

10 kAIC Input Breaker

A: Alarms/Communication: Summary Form C alarm (30V/2A)

Summary-LCD display with one (1) programmable summary form C contact to alarm on issues such as AC Fail, charger fail, low DC voltage, high DC voltage, ground fault positive or negative, battery check fail

Mounting/Additional Features: Wall mount

Output Breaker Rating is 10 kAIC

SENS EnerGenius® IQ2 Filtered battery charger, fully automatic

Dual microprocessor controlled

Front panel user interface

Digital amp and volt meters

On-board battery checking

Load Share Capable; load kit cable quoted separately

AC and DC breakers

UL/C-UL listed

Seismic certified to IBC 2006-2021 to an Sds value of 2.50g

19.4 in (W) x 13.0 in (D) x 17.6 in (H), 186 lbs

Estimated Weight: 1,475 lbs.

UL/cUL Listed

Heat Loss for the charger: 246 watts



REFERENCE: Georgia, Kennedy and College St Substations

(12) Part Number BP-GHB2020 to include:

20A, Two Pole DC Breaker for the DC Distribution Panel in the above PowerCab. Breaker capacities from 15A to 60A are also available at the same price per breaker. Up to 12 breakers can be used in the DC distribution panel in the PowerCab. Number of circuits or breaker capacity were not specified; the quantity quoted here provides one distribution breaker per switchgear breaker, plus two spare breakers. The breaker ampacity was not provided; the customer is responsible for verifying that the breakers are correct for the application.

Estimated Shipping and Handling Charges - Shipping and handling – PowerCab system as quoted above

Shipping and handling Estimated to Houston, TX 77061 via standard ground transportation.

This freight estimate assumes no options such as a tailgate lift is required on site.

This freight estimate is included to provide an approximate freight cost to the customer. Our freight terms are FCA factory. SENS will pre-pay freight charges and add them to the customer's invoice upon request. The amount invoiced will be based on the actual freight charges.



REFERENCE: Georgia, Kennedy and College St Substations

Stairs and Landings

Tag Number: WEST SWGR - GEORGIA ST.

- (1) **Lot Stairs, Platforms, and Removable Handrails to include:
Approx. Weight 3,578 lbs. per Stair & Platform**

Platform Sizes (shipping sections) are as follows:

- Two (2) 6'L x 6'W Platforms.
- Two (2) Stairways approx. 3' 4"L x 3'W x 8"H. Top of Stairs to be 15" above grade.

P.E. Structural Load Calcs./ Stamped Dwgs for the State of Florida.

- Review to be done after Grimes dwgs are approved for construction

All Stairs & Platforms listed below will be built per IBC & the following:

- All platform perimeters shall be of A-36 C10 x 15.3# w/ C6 x 8.2# channel cross members & 2" x 1/4" angle grating support.
- All platforms to have 19-W-4 1-1/4" x 3/16" serrated bar grating walking surface.
- 1-1/2" Sch. 40 removable pipe Railing with 3" x 3/8" Flat Bar uprights.
- Additional 1-1/2" Sch. 40 pipe stairway handrail at 36" above nosing of stair treads on both sides of stairway.
- 4" x 1/4" Flat bar toe plates around all platform perimeters.
- Platform support columns to be of HSS 3" x 3" x 1/4" w/ 7" x 7" x 3/8" top & 8" x 8" x 3/8" bottom plates.
- Stair stringers to be of A-36 C8 x 11.5# Channel with 19-W-4 1-1/4" x 3/16" serrated bar grating welded treads w/checkered nosing.
- All components to be ASTM A123 Spec. Hot Dip Galvanized (post assembly) unpainted.
- Approval drawings will be 2-3 weeks after receipt of Customer approved PDC Plan View & Elevation Dwgs.
- Platforms will have location designation welded on platforms as required.
- Anchoring design and hardware by others, all other hardware is included in price.



REFERENCE: Georgia, Kennedy and College St Substations

13.2kV Metal Clad Switchgear
Tag Number: WEST SWGR - GEORGIA ST.

One (1) line-up of PowlVac® metal clad switchgear with vacuum circuit breakers designed in accordance with ANSI standards C37.04, C37.06, C37.20.2, and rated as follows:

Maximum Voltage Class:	15 kV
Service Voltage:	13.2 kV
Basic Impulse Level:	95 kV
Power Frequency Withstand:	36 kV
Voltage Range (K factor):	1
Short-circuit Current Rating:	25 kA rms
Close and Latch Capacity:	65 kA Peak
Close Voltage:	125 VDC
Trip Voltage:	125 VDC
Frequency:	60 Hz

(7) Vertical sections of metal clad switchgear each with the following common features:

- Indoor enclosure, NEMA 1, 11 gauge steel
- Basic one high construction including a standard rear access door as an integral part of the PCR®
- Laminated plastic mimic bus
- 3000A main bus, silver plated copper, 3 phase, 3 wire
- Flame retardant and track resistant Bonded Epoxy bus insulation system
- Epoxy main bus pass through insulators in a glass polyester mounting
- Carbon steel Grade 5 mounting hardware, plated for corrosion protection
- Phase polarity 1 2 3 or A B C, front to back, top to bottom, left to right
- Ground bus, 1/4 x 2, copper with plating to match main bus
- Control terminal blocks, 600 volt, 30 ampere
- Control wiring, 14 gauge, 41 strand, type SIS with VW-1 flame retardant rating
- Control wire termination, insulated, locking fork/spade tongue, crimp type
- Current transformer shorting type terminal blocks
- Current transformer wiring, 10 gauge, 105 strand, type SIS with VW-1 flame retardant rating
- Current transformer wire termination, insulated, ring tongue, crimp type
- Wire harnesses
- Common DC bus #8 AWG SIS wire with seamless ring tongue terminations
- Raised profile nameplates with nylon push-in fasteners
- Wiremarkers, sleeve type
- Enclosure space heater with expanded metal cage, rated 240VAC, energized @ 120VAC



REFERENCE: Georgia, Kennedy and College St Substations

- Barrier behind the instrument compartment doors
- Textured powder coat paint finish
- ANSI-61, light gray exterior with white instrument panels

(1) Set of enclosure options:

- 1 Space heater circuit with MCCB supply disconnect, thermostat and bypass switch
- 2 Ground cable lugs (4/0)

(1) Set switchgear main bus voltage monitoring equipment, each to include:

- Roll-out assembly complete with primary & secondary fuses
- 3 Voltage transformers, 8400:120 volt

(5) FEEDER circuit breaker equipment sets, each to include:

- Circuit breaker cell rated 1200 ampere with closed door racking provision, viewing window, integral light and remote switch, riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
 - Silver plated copper runback bus assembly rated 1200A with boots
 - Epoxy bus standoff assembly
- 1 **PowlVac drawout vacuum circuit breaker rated 15kV, 1200A, 25kA with closed door racking provision, 15PV25, with 3 "a" & 3 "b" contacts**
 - Circuit breaker switch, MOC 13 circuit (7 a & 6 b)
 - Circuit breaker switch, TOC 13 circuit (7 a & 6 b)
 - Shutter position indicator
 - Door provision for electrical racking device
 - 1 Molded Case Circuit Breaker disconnect, 125VDC, 2 pole
 - 1 Set close circuit disconnect fuse block with fuses
 - 1 Set trip circuit disconnect fuse block with solid link
 - 3 Set relay circuit disconnect fuse block with fuses
 - 6 Current transformers, multi ratio, high burden
 - 1 Control switch, open/close
 - 3 Indicating lights LED type
 - 3 Test switch with rear wired connection and semi-flush mount, 10-pole (ABB required)
 - 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)
 - 1 Shark® 100-60-10-V2-D2-485P-X
 - 3 Station Class Surge Arresters, 15 kV, polymer
 - 3 Cable lugs, 750 MCM
 - 3 Set cover boots
 - 1 Lot nameplates



REFERENCE: Georgia, Kennedy and College St Substations

(2) TIE FEEDER circuit breaker equipment sets, each to include:

- Circuit breaker cell rated 3000 ampere with closed door racking provision, viewing window, integral light and remote switch, riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
- Silver plated copper runback bus assembly rated 3000A with boots
- Epoxy bus standoff assembly
- 1 PowlVac drawout vacuum circuit breaker rated 15kV, 3000A, 25kA with closed door racking provision, 15PV25, with 3 "a" & 3 "b" contacts**
- Circuit breaker switch, MOC 13 circuit (7 a & 6 b)
- Circuit breaker switch, TOC 13 circuit (7 a & 6 b)
- Shutter position indicator
- Door provision for electrical racking device
- 1 Molded Case Circuit Breaker disconnect, 125VDC, 2 pole
- 1 Set close circuit disconnect fuse block with fuses
- 1 Set trip circuit disconnect fuse block with solid link
- 3 Set relay circuit disconnect fuse block with fuses
- 6 Current transformers, multi ratio, high burden
- 1 Control switch, open/close
- 3 Indicating lights LED type
- 2 Test switch with rear wired connection and semi-flush mount, 10-pole (ABB required)
- 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)
- 1 SEL-2407 satellite-synchronized clock (24070A03B, 2407#2FJD)
- 1 SEL-953 Coaxial Cable C953#0102
- 1 SEL-3350 Automation Controller (3350#1KP4)
- 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)
- 3 Station Class Surge Arresters, 15 kV, polymer
- 3 Cable lugs, 750 MCM
- 3 Set cover boots
- 1 Lot nameplates

(1) Arcteq Arc Quencher Systems, each to include:

- 1 Arc Quencher Protective Relay (AQ-110PLV - AQ-110PLV-AABA)
- 1 Arc Flash Sensor Relays (AQ-103 - AQ-103LV)
- 1 AQ System C50 Controller with Ethernet Communications (T4-PAC-C80)
- 14 AQ System 10" Color Touchscreen HMI (T4-PAC-HMI)
- 1 MV Arc Quencher Device with 3AM4 (SiQuench AQD - 3AM4132-1DA12-0AB2-Z)
- 2 Arc Flash Point Light Sensors (AQ-01 (PLS) - AQ-01C-XXX)



REFERENCE: Georgia, Kennedy and College St Substations

- 1 Arc Quencher Assertion Fiber Cables, 3 meter length (AX-001-3)
- 1 Safety+ Annunciator Panel 22mmPL + Siren (T4AQ SAP)
- 1 Nexus 1500+ Time-Date SOE Recorder & Power Meter (1500+-D-60-20-V1-X-X-6R01-X)
- 1 RJ-45 External Port (2866763)
- 1 Phoenix Quint Power Supplies (492075)
- 1 Lot nameplates

(1) Set of switchgear accessories to include:

- 1 Manual charging handle
- 1 Circuit breaker racking handle
- 1 Interlock override
- 1 Circuit breaker test cabinet with secondary disconnect plug
- 1 Electrically operated racking device
- 1 Circuit breaker lift truck
- 6 SEL-2814M0 (configuration# 2814M0)
- 12 SEL-2812 (configuration# 2812MRX0)
- 12 SEL-2812 (configuration# 2812MTX0)
- 12 SEL Multimode Fiber-Optic Cable, (C808Z01000X0002, C808#F7JN)



REFERENCE: Georgia, Kennedy and College St Substations

Power Control Room

Tag Number: KENNEDY STREET T11 PCR

One (1) Powell PCR®, Power Control Room suitable for installation in an unclassified area with approximate exterior dimensions of:

15' 0" Wide with 6" wall thickness	Low ambient temperature: 38°F
39' 0" Long with 6" wall thickness	High ambient temperature: 93°F
11' 0" High less base and roof cap (interior height)	Altitude: 36 FT. above sea level

Estimated shipping dimensions and weight:

15' 9" Wide including 4.5" overhang on each side	Roof live load: 20 PSF
39' 0" Long with no overhang on each end	Floor live load: 150 PSF
13' 7" High including base and roof cap (approximate)	Basic wind speed: 135 MPH
Estimated weight including equipment: 69,164 LBS	

Structural Base:

- Welded channel construction, skid type, with structural supports and removable lifting lugs
- Steel floor, 1/4" thick with non-skid paint.
- 21 Floor penetrations, with surface mounted covers

Metal Preparation and Paint Finish:

- The welded base assembly is grit blasted to comply with the Commercial Blast Standard SSPC-6 as published by AISC.
- After blast, a primer is applied to the entire base using an industrial grade, high solid, and high build epoxy. The primer is applied to a minimum thickness of 4 mils.
- The structural elements of the base including all channels and angles are caulked to seal gaps and spaces that might allow moisture to collect.
- A second application of industrial grade, high solid, high-build epoxy is applied to the bottom of the base assembly. This application is BLACK in color and is applied to a minimum thickness of 4 mils.
- The sides of the base are finished using a black polyurethane paint with a minimum thickness of 2 mils.
- Total dry film thickness after coating:
 - For the top of the floor is 6 mils minimum
 - For the sides of the base is 6 mils minimum
 - For the bottom of the base is 8 mils minimum



REFERENCE: Georgia, Kennedy and College St Substations

- Exterior interlocking panels, will be White (ANSI 01) per Powell Application Procedure. All interlocking panels and interior wall liners are pre-painted prior to assembly. An all-weather sealant is applied to all seams.

Exterior Wall, Interior Wall, Ceiling, and Roof Panels:

- Exterior walls and roof to be constructed of interlocking Powell, Pow-R-Loc panels. The design as a minimum, is to meet wind load requirements of FBC 2023
- Wall panels of 18 gauge galvanized steel painted Gray (ANSI 61) (Textured)
- Roof panels of 18 gauge galvanized steel painted White (ANSI 01) (Smooth)
- Interior wall liner panels 16 gauge galvanized steel painted White (ANSI 01) (Smooth)
- Interior ceiling panels 14 gauge galvanized steel with integral Powl Strut System painted White (ANSI 01) (Smooth)
- Roof will have a slope of 1/4 inches per foot minimum
- 80 Linear feet of Painted Aluminum Gutter with Downspouts to Grade

Insulation for Base, Walls and Roof:

- Polyurethane spray on foam (2" R-13.4), meets ASTM E84 Flame Spread Test
- 6" code compliant wall with effective R-18.3 continuous insulation
- Code compliant roof with effective R-35.6 continuous insulation

Doors and Hardware:

- 2 Sets of aluminum panic door hardware, with door closer & key lock
- 2 Equipment door, single wide, 4' x 9', Painted Galv Steel, with 12" X 12" viewing window
- 10 Painted galvanized equipment rear access doors without split
- 2 Rain canopies over SINGLE wide equipment doors (Alu.)
- 30 Linear feet of drip shield over rear access doors (Alu.)

The PCR® will include the following accessory items:

- 1 AC Panel 208/120VAC, 3 Phase, 4 Wire, 250A Main Bus, 42ckt with 150A Main Breaker, 22kAIC
- 1 Building services transformer, 480-120/208 volt 3 phase 45 kVA, Type DOE2016, Copper windings, 150 degree C rise
- 1 Lot of Interior Vapor Tight LED lighting fixtures
- 2 Interior LED lighting fixtures, with a minimum 90 minutes emergency battery backup
- 2 Light switches



REFERENCE: Georgia, Kennedy and College St Substations

- 4 Convenience receptacles
- 2 Exterior GFCI receptacles
- 2 Exit & Emergency Light Combo with dual LED lamps, 120/277 VAC
- 1 Lot of EMT conduit and wireway for interior and RGS for exterior building services
- 1 Lot of THHN/THWN wiring for utility lights, receptacles and space heater circuits

Equipment Power and Control Wiring and Interconnections:

- 45 Feet of cable tray 6" wide x 4" deep galvanized with covers
- 80 Feet of cable tray 24" wide x 4" deep Aluminum
- 1 Cable tray tees 4" deep 24" wide
- 4 Cable tray elbows 4" deep 24" wide
- PCR Power wiring limited to 218 Terminations
- PCR Control wiring limited to 8 Terminations
- PCR Instrumentation wiring limited to 60 Terminations
- PCR Communication wiring limited to 10 Terminations

Grounding System:

- 120 Linear feet of bare Copper ground bus 1/4" x 2"
- 4 Copper ground pads on diagonal corners of building frame
- 10 Interconnection from each equipment ground bus to building frame
- 2 Interconnection from each equipment ground bus to building ground loop

Exterior Devices:

- 2 General Purpose exterior light, LED Wall Pack, 70W Metal Halide Equivalent

UPS and DC System Components:

- 1 Battery exhaust fan and duct assembly
- 1 Hydrogen Gas Detector Powell standard
- 1 Eye Wash & Bowl
- 1 Mechanical installation of a Stackable 125 VDC Battery System
- 1 Furnished and install Safety Disconnect Switch, Non-Fusible, 2-Pole, NEMA 1, 100A



REFERENCE: Georgia, Kennedy and College St Substations

Standard HVAC System:

- 1 Building HVAC system for a non-classified area, to include:
- 2 3-Ton Wall mounted HVAC with 6.8kW electric heat unit, 208-230V, 3-phase, 60Hz to include:
 - BARD 11.0 EER HVAC part no. W36AF-B09XXAXXJ
 - Aluminum air conditioner cabinet
 - Low Ambient control with Barometric Damper for compressor operation down to 0° Fahrenheit
 - Compressor control module located on the Back side, adjustable from 30 seconds to 5 minutes
 - Phase rotation monitor
 - High and Low pressure switches with built-in auto-reset
 - Factory installed internal disconnect MCCB, padlockable
 - MERV2 1-in disposable air filter
 - Dry contracts for remote alarm or lockout
 - Auto changeover digital thermostat
 - ANSI/UL STD 60335-1 & 60335-2-40/CSA STD C22.2 #60335-1 & #60335-2-40

HVAC Accessories:

- 1 Lead lag controller, 2 units, MC4002
- 1 High temperature alarm
- 2 Safety Disconnect Switch, Non-Fusible, 3-Pole, NEMA 3R, installed on wall mounted HVAC

Mechanical Equipment Installation:

- 1 Lot of installation of Powell furnished equipment to include:
 - 10 Sections of Medium Voltage Switchgear
 - 1 Mechanical installation of a circuit breaker test cabinet
 - 2 Wall Mounted HVAC Unit(s)
 - 1 Wall Mounted NEMA 1 Enclosure with Annunciator SEL 2533012130XA2X0 (2533#PGBF)
 - 1 Wall Mounted fold-away workbench, 28"D x 48" Long, made of polyethylene, 300LBs work surface capacity



REFERENCE: Georgia, Kennedy and College St Substations

Miscellaneous:

- 1 Installation Chatsworth Fiber optic rack (Chatsworth 55053-103)
- 2 Door Limit Switch contact alarms (Honeywell DTE6-2RN2)
- 1 Class D Halotron 11 lb. Fire Extinguisher (Kidde 4XP83)
- 1 Lot of Internal device nameplates if required
- 1 Structural Analysis by Professional Engineer for the State of Florida to confirm PCR design and structural integrity per FBC 2023
- 1 State of Florida code compliance licensing fee
- Powell's PCR design shall be guided by FBC 2023 and FBCEC 2023
- Equipment clearance and egress proposed are based on the NEC 2020


REFERENCE: Georgia, Kennedy and College St Substations
Fire Detection System
Kennedy Street T11

The building is protected by a conventional fire alarm system. Building fire alarm control panel will power and monitor all of the fire detection devices and operate the fire detection audible and visual devices for the building. We have relays in the fire alarm panel for tie in by others to shut down the HVAC units upon an alarm condition and notify the customer of alarm and trouble conditions.

Kennedy Street T11 PCR Building Dimensions: 39' x 15' x 11'
(There is no suspended ceiling or raised floor in the building)

Qty	Manufacturer	Description
1	Fire-Lite	MS4 Conventional Fire Alarm Panel
2	Powersonic	PS1270 Battery 12 volt 7 amp.hr.
2	Fire-Lite	Photoelectric Detector with Base
2	Fire-Lite	Manual Pull Station
1	Fire-Lite	Alarm Horn Strobe
1	Fire-Lite	HVAC Controller Relay
2	Fire-Lite	Client Relay for SCADA Tie In By Others
1 lot	Advantage	Installation Labor and Materials

SCOPE OF WORK
1. General.

- 1.1. Provide shop drawings, calculations, and submittal literature.
- 1.2. Provide "as-built" drawings and "Operation & Maintenance Manuals" subsequent to the completion of the installation.
- 1.3. Testing in the presence of the Authority Having Jurisdiction at the Powell facility in Houston, Texas.
- 1.4. Provide labor and materials for the installation of all Advantage Interests supplied equipment.

2. Conventional Fire Detection Systems.

- 2.1. Provide new fire detection equipment for Powell RFQ 261652 dated 10-29-24, subsequent emails and phone conversations.
- 2.2. Provide photoelectric detectors, manual pull stations, audible visual devices, fire detection control panels, and associated hardware to complete the installation of the conventional fire detection systems.



REFERENCE: Georgia, Kennedy and College St Substations

Battery

(1) DC PowerCab – Part No. 4BG8220NTBAC00 to include:

DC PowerCab

4: Cabinet Type: NEMA 1, indoor, steel construction, 30.5W x 31.5D x 79H

B: Number of Cabinets: 1 cabinet, key lock main door, finger turn latch access to breakers, field selectable bottom/top cable entry

G: Cabinet Finish: ANSI 61 gray finish

8: DC Output Voltage: 120

1: Number of Battery Strings: 1 String

10: Battery Capacity: 100AH (nominal)

Battery: 96AH; one 96Ah battery string

DEKA Unigy I, 12AVR100ET or similar

10 year design life.

Flame Retardant, UL94-VO/L.O.I. 28%

Total Electrolyte Volume: 13.5 gallons

Short Circuit Current: 3,070 amps

Hydrogen Evolution: See the attached Battery Ventilation Requirements

Weights and Dimensions: See the attached Rack Drawing and Info.pdf

N: Output Current: 16 Amps, 20 Amp Breaker (charger to panelboard)

T: Input Voltage: 115-120/208/230-240 V, 60 Hz, single phase

B: Feature Package: Eliminator Plus package: Eliminator + reverse polarity diode, blocking diode

A: Alarms and Communication: Summary Form C alarm (30V/2A)

C: DC Load Center: Internal Panel, 100A 2-pole Battery Main, 2-pole Charger Feed + 12 2-pole DC breaker positions

0: Low Voltage Load Disconnect: None

0: Inverter: None

10 year design life

1 cabinet(s), each: 30.5 in (W) x 31.5 in (D) x 79 in (H)

DC circuit breakers are ordered as a separate line item and are not indicated within the PowerCab part number.

PLEASE NOTE THAT THIS POWERCAB MAY BE BROKEN APART INTO MULTIPLE LINE ITEMS ON THE CUSTOMER ORDER CONFIRMATION AND/OR THE INVOICE



REFERENCE: Georgia, Kennedy and College St Substations

This PowerCab includes the charger: Q120016TL514A

EnerGenius IQ

120: DC Output Voltage: 120 VDC

16: Output Current: 16 ADC

T: AC Input Voltage: 115-120/208/230-240 V, 60 Hz, single phase

L: Agency Marks: C-UL 1012 listed (60 Hz units)

514: Feature Package: Standard breaker, standard filter plus lower ripple filter, reverse polarity diode, blocking diode

120 V Eliminator Output Filtering: 30 mV ripple filter with battery or 100 mV without battery

10 kAIC Input Breaker

A: Alarms/Communication: Summary Form C alarm (30V/2A)

Summary-LCD display with one (1) programmable summary form C contact to alarm on issues such as AC Fail, charger fail, low DC voltage, high DC voltage, ground fault positive or negative, battery check fail

Mounting/Additional Features: Wall mount

Output Breaker Rating is 10 kAIC

SENS EnerGenius® IQ2 Filtered battery charger, fully automatic

Dual microprocessor controlled

Front panel user interface

Digital amp and volt meters

On-board battery checking

Load Share Capable; load kit cable quoted separately

AC and DC breakers

UL/C-UL listed

Seismic certified to IBC 2006-2021 to an Sds value of 2.50g

19.4 in (W) x 13.0 in (D) x 17.6 in (H), 186 lbs

Estimated Weight: 1,475 lbs.

UL/cUL Listed

Heat Loss for the charger: 246 watts



REFERENCE: Georgia, Kennedy and College St Substations

(12) Part Number BP-GHB2020 to include:

20A, Two Pole DC Breaker for the DC Distribution Panel in the above PowerCab. Breaker capacities from 15A to 60A are also available at the same price per breaker. Up to 12 breakers can be used in the DC distribution panel in the PowerCab. Number of circuits or breaker capacity were not specified; the quantity quoted here provides one distribution breaker per switchgear breaker, plus two spare breakers. The breaker ampacity was not provided; the customer is responsible for verifying that the breakers are correct for the application.

Estimated Shipping and Handling Charges - Shipping and handling – PowerCab system as quoted above

Shipping and handling Estimated to Houston, TX 77061 via standard ground transportation.

This freight estimate assumes no options such as a tailgate lift is required on site.

This freight estimate is included to provide an approximate freight cost to the customer. Our freight terms are FCA factory. SENS will pre-pay freight charges and add them to the customer's invoice upon request. The amount invoiced will be based on the actual freight charges.



REFERENCE: Georgia, Kennedy and College St Substations

Stairs and Landings

Tag Number: KENNEDY STREET T11 PCR

- (1) Lot Stairs, Platforms, and Removable Handrails to include:
Approx. Weight 3,578 lbs. per Stair & Platform**

Platform Sizes (shipping sections) are as follows:

- Two (2) 6'L x 6'W Platforms.
- Two (2) Stairways approx. 3' 4"L x 3'W x 8"H. Top of Stairs to be 15" above grade.

P.E. Structural Load Calcs./ Stamped Dwgs for the State of Florida.

- Review to be done after Grimes dwgs are approved for construction

All Stairs & Platforms listed below will be built per IBC & the following:

- All platform perimeters shall be of A-36 C10 x 15.3# w/ C6 x 8.2# channel cross members & 2" x 1/4" angle grating support.
- All platforms to have 19-W-4 1-1/4" x 3/16" serrated bar grating walking surface.
- 1-1/2" Sch. 40 removable pipe Railing with 3" x 3/8" Flat Bar uprights.
- Additional 1-1/2" Sch. 40 pipe stairway handrail at 36" above nosing of stair treads on both sides of stairway.
- 4" x 1/4" Flat bar toe plates around all platform perimeters.
- Platform support columns to be of HSS 3" x 3" x 1/4" w/ 7" x 7"x 3/8" top & 8" x 8" x 3/8" bottom plates.
- Stair stringers to be of A-36 C8 x 11.5# Channel with 19-W-4 1-1/4" x 3/16" serrated bar grating welded treads w/checkered nosing.
- All components to be ASTM A123 Spec. Hot Dip Galvanized (post assembly) unpainted.
- Approval drawings will be 2-3 weeks after receipt of Customer approved PDC Plan View & Elevation Dwgs.
- Platforms will have location designation welded on platforms as required.
- Anchoring design and hardware by others, all other hardware is included in price.
-



REFERENCE: Georgia, Kennedy and College St Substations

13.2kV Metal Clad Switchgear

Tag Number: T11 SWGR - KENNEDY ST.

One (1) line-up of PowlVac® metal clad switchgear with vacuum circuit breakers designed in accordance with ANSI standards C37.04, C37.06, C37.20.2, and rated as follows:

Maximum Voltage Class:	15 kV
Service Voltage:	13.2 kV
Basic Impulse Level:	95 kV
Power Frequency Withstand:	36 kV
Voltage Range (K factor):	1
Short-circuit Current Rating:	25 kA rms
Close and Latch Capacity:	65 kA Peak
Close Voltage:	125 VDC
Trip Voltage:	125 VDC
Frequency:	60 Hz

(10) Vertical sections of metal clad switchgear each with the following common features:

- Indoor enclosure, NEMA 1, 11 gauge steel
- Basic one high construction including a standard rear access door as an integral part of the PCR®
- Laminated plastic mimic bus
- 3000A main bus, silver plated copper, 3 phase, 3 wire
- Flame retardant and track resistant Bonded Epoxy bus insulation system
- Epoxy main bus pass through insulators in a glass polyester mounting
- Carbon steel Grade 5 mounting hardware, plated for corrosion protection
- Phase polarity 1 2 3 or A B C, front to back, top to bottom, left to right
- Ground bus, 1/4 x 2, copper with plating to match main bus
- Control terminal blocks, 600 volt, 30 ampere
- Control wiring, 14 gauge, 41 strand, type SIS with VW-1 flame retardant rating
- Control wire termination, insulated, locking fork/spade tongue, crimp type
- Current transformer shorting type terminal blocks
- Current transformer wiring, 10 gauge, 105 strand, type SIS with VW-1 flame retardant rating
- Current transformer wire termination, insulated, ring tongue, crimp type
- Wire harnesses
- Common DC bus #8 AWG SIS wire with seamless ring tongue terminations
- Raised profile nameplates with nylon push-in fasteners
- Wiremarkers, sleeve type
- Enclosure space heater with expanded metal cage, rated 240VAC, energized @ 120VAC



REFERENCE: Georgia, Kennedy and College St Substations

- Barrier behind the instrument compartment doors
- Textured powder coat paint finish
- ANSI-61, light gray exterior with white instrument panels

(1) Set of enclosure options:

- 1 Space heater circuit with MCCB supply disconnect, thermostat and bypass switch
- 2 Ground cable lugs (4/0)

(1) Set incoming line voltage monitoring equipment, each to include:

- Roll-out assembly complete with primary & secondary fuses
- 3 Voltage transformers, 8400:120 volt

(1) Set switchgear main bus voltage monitoring equipment, each to include:

- Roll-out assembly complete with primary & secondary fuses
- 3 Voltage transformers, 8400:120 volt

(1) MAIN circuit breaker equipment set, each to include:

- Circuit breaker cell rated 3000 ampere with closed door racking provision, viewing window, integral light and remote switch, riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
- Silver plated copper runback bus assembly rated 3000A with boots
- Epoxy bus standoff assembly
- 1 PowlVac drawout vacuum circuit breaker rated 15kV, 3000A, 25kA with closed door racking provision, 15PV25, with 3 "a" & 3 "b" contacts**
- Circuit breaker switch, MOC 13 circuit (7 a & 6 b)
- Circuit breaker switch, TOC 13 circuit (7 a & 6 b)
- Shutter position indicator
- Door provision for electrical racking device
- 1 Set close circuit disconnect fuse block with fuses
- 1 Set trip circuit disconnect fuse block with solid link
- 2 Set relay circuit disconnect fuse block with fuses
- 6 Current transformers, multi ratio, high burden
- 1 Control switch, open/close
- 3 Indicating lights LED type
- 1 Device 86, lockout relay LOR, 5 decks, 20 contacts
- 6 Test switch with rear wired connection and semi-flush mount, 10-pole (ABB required)
- 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)



REFERENCE: Georgia, Kennedy and College St Substations

- 1 ION 7650 Transducer (SQD# METSEION92040)
- 1 Shark® 100-60-10-V2-D2-485P-X
- 1 SEL 787 Transformer Protection Relay (07871X1ACACAA5850220, 787#GTKF)
- 1 INCON Tap position monitor 1250B-1-S
- 1 Beckwith Digital Tap changer Control (M-2001c-6SL)
- 1 SEL-487B with Conventional Secondary Inputs (0487B1X4X52XC0XEH9EEEEEX, 487B#PNKP)
- 3 Cable lugs, 500 MCM
- 3 Set cover boots
- 1 Lot nameplates

(8) FEEDER circuit breaker equipment sets, each to include:

- Circuit breaker cell rated 1200 ampere with closed door racking provision, viewing window, integral light and remote switch, riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
- Silver plated copper runback bus assembly rated 1200A with boots
- Epoxy bus standoff assembly
- 1 **PowlVac drawout vacuum circuit breaker rated 15kV, 1200A, 25kA with closed door racking provision, 15PV25, with 3 "a" & 3 "b" contacts**
- Circuit breaker switch, MOC 13 circuit (7 a & 6 b)
- Circuit breaker switch, TOC 13 circuit (7 a & 6 b)
- Shutter position indicator
- Door provision for electrical racking device
- 1 Molded Case Circuit Breaker disconnect, 125VDC, 2 pole
- 1 Set close circuit disconnect fuse block with fuses
- 1 Set trip circuit disconnect fuse block with solid link
- 3 Set relay circuit disconnect fuse block with fuses
- 6 Current transformers, multi ratio, high burden
- 1 Control switch, open/close
- 3 Indicating lights LED type
- 3 Test switch with rear wired connection and semi-flush mount, 10-pole (ABB required)
- 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)
- 1 Shark® 100-60-10-V2-D2-485P-X
- 3 Station Class Surge Arresters, 15 kV, polymer
- 3 Cable lugs, 750 MCM
- 3 Set cover boots
- 1 Lot nameplates



REFERENCE: Georgia, Kennedy and College St Substations

(1) TIE FEEDER circuit breaker equipment set, each to include:

- Circuit breaker cell rated 3000 ampere with closed door racking provision, viewing window, integral light and remote switch, riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
- Silver plated copper runback bus assembly rated 3000A with boots
- Epoxy bus standoff assembly
- 1 PowlVac drawout vacuum circuit breaker rated 15kV, 3000A, 25kA with closed door racking provision, 15PV25, with 3 "a" & 3 "b" contacts**
- Circuit breaker switch, MOC 13 circuit (7 a & 6 b)
- Circuit breaker switch, TOC 13 circuit (7 a & 6 b)
- Shutter position indicator
- Door provision for electrical racking device
- 1 Molded Case Circuit Breaker disconnect, 125VDC, 2 pole
- 1 Set close circuit disconnect fuse block with fuses
- 1 Set trip circuit disconnect fuse block with solid link
- 3 Set relay circuit disconnect fuse block with fuses
- 6 Current transformers, multi ratio, high burden
- 1 Control switch, open/close
- 3 Indicating lights LED type
- 2 Test switch with rear wired connection and semi-flush mount, 10-pole (ABB required)
- 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)
- 1 SEL-2407 satellite-synchronized clock (24070A03B, 2407#2FJD)
- 1 SEL-953 Coaxial Cable C953#0102
- 1 SEL-3350 Automation Controller (3350#1KP4)
- 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)
- 3 Station Class Surge Arresters, 15 kV, polymer
- 3 Cable lugs, 750 MCM
- 3 Set cover boots
- 1 Lot nameplates

(1) Arcteq Arc Quencher Systems, each to include:

- 1 Arc Quencher Protective Relay (AQ-110PLV - AQ-110PLV-AABA)
- 1 Arc Flash Sensor Relays (AQ-103 - AQ-103LV)
- 1 AQ System C50 Controller with Ethernet Communications (T4-PAC-C80)
- 14 AQ System 10" Color Touchscreen HMI (T4-PAC-HMI)
- 1 MV Arc Quencher Device with 3AM4 (SiQuench AQD - 3AM4132-1DA12-0AB2-Z)
- 2 Arc Flash Point Light Sensors (AQ-01 (PLS) - AQ-01C-XXX)
- 1 Arc Quencher Assertion Fiber Cables, 3 meter length (AX-001-3)



REFERENCE: Georgia, Kennedy and College St Substations

- 1 Safety+ Annunciator Panel 22mmPL + Siren (T4AQSAP)
- 1 Nexus 1500+ Time-Date SOE Recorder & Power Meter (1500+-D-60-20-V1-X-X-6R01-X)
- 1 RJ-45 External Port (2866763)
- 1 Phoenix Quint Power Supplies (492075)
- 1 Lot nameplates

(1) Set of switchgear accessories to include:

- 1 Manual charging handle
- 1 Circuit breaker racking handle
- 1 Interlock override
- 1 Circuit breaker test cabinet with secondary disconnect plug
- 1 Electrically operated racking device
- 1 Circuit breaker lift truck
- 6 SEL-2814M0 (Configuration# 2814M0)
- 12 SEL-2812 (Configuration# 2812MRX0)
- 12 SEL-2812 (Configuration# 2812MTX0)
- 12 SEL Multimode Fiber-Optic Cable, (C808Z01000X0002, C808#F7JN)



REFERENCE: Georgia, Kennedy and College St Substations

13.2KV METAL CLAD SWITCHGEAR

Tag Number: EAST SWGR - COLLEGE ST.

One (1) line-up of PowlVac® metal clad switchgear with vacuum circuit breakers designed in accordance with ANSI standards C37.04, C37.06, C37.20.2, and rated as follows:

Maximum Voltage Class:	15 kV
Service Voltage:	13.2 kV
Basic Impulse Level:	95 kV
Power Frequency Withstand:	36 kV
Voltage Range (K factor):	1
Short-circuit Current Rating:	25 kA rms
Close and Latch Capacity:	65 kA Peak
Close Voltage:	125 VDC
Trip Voltage:	125 VDC
Frequency:	60 Hz

(13) Vertical sections of metal clad switchgear each with the following common features:

- Indoor enclosure, NEMA 1, 11 gauge steel
- Basic one high construction including a standard rear access door as an integral part of the PCR®
- Laminated plastic mimic bus
- 3000A main bus, silver plated copper, 3 phase, 3 wire
- Flame retardant and track resistant Bonded Epoxy bus insulation system
- Epoxy main bus pass through insulators in a glass polyester mounting
- Carbon steel Grade 5 mounting hardware, plated for corrosion protection
- Phase polarity 1 2 3 or A B C, front to back, top to bottom, left to right
- Ground bus, 1/4 x 2, copper with plating to match main bus
- Control terminal blocks, 600 volt, 30 ampere
- Control wiring, 14 gauge, 41 strand, type SIS with VW-1 flame retardant rating
- Control wire termination, insulated, locking fork/spade tongue, crimp type
- Current transformer shorting type terminal blocks
- Current transformer wiring, 10 gauge, 105 strand, type SIS with VW-1 flame retardant rating
- Current transformer wire termination, insulated, ring tongue, crimp type
- Wire harnesses
- Common DC bus #8 AWG SIS wire with seamless ring tongue terminations
- Raised profile nameplates with nylon push-in fasteners
- Wiremarkers, sleeve type
- Enclosure space heater with expanded metal cage, rated 240VAC, energized @ 120VAC



REFERENCE: Georgia, Kennedy and College St Substations

- Barrier behind the instrument compartment doors
- Textured powder coat paint finish
- ANSI-61, light gray exterior with white instrument panels

(1) Set of enclosure options:

- 1 Space heater circuit with MCCB supply disconnect, thermostat and bypass switch
- 2 Ground cable lugs (4/0)
- 2 Bus duct terminations 3000A, Top Entry

(2) Sets incoming line voltage monitoring equipment, each to include:

- Roll-out assembly complete with primary & secondary fuses
- 3 Voltage transformers, 8400:120 volt

(2) Sets switchgear main bus voltage monitoring equipment, each to include:

- Roll-out assembly complete with primary & secondary fuses
- 3 Voltage transformers, 8400:120 volt

(2) (ET1, ET2) MAIN circuit breaker equipment sets, each to include:

- Circuit breaker cell rated 3000 ampere with closed door racking provision, viewing window, integral light and remote switch, riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
- Silver plated copper runback bus assembly rated 3000A with boots
- Epoxy bus standoff assembly
- 1 **PowlVac drawout vacuum circuit breaker rated 15kV, 3000A, 25kA with closed door racking provision, 15PV25, with 3 "a" & 3 "b" contacts**
- Circuit breaker switch, MOC 13 circuit (7 a & 6 b)
- Circuit breaker switch, TOC 13 circuit (7 a & 6 b)
- Shutter position indicator
- Door provision for electrical racking device
- 1 Set close circuit disconnect fuse block with fuses
- 1 Set trip circuit disconnect fuse block with solid link
- 2 Set relay circuit disconnect fuse block with fuses
- 6 Current transformers, multi ratio, high burden
- 1 Control switch, open/close
- 3 Indicating lights LED type
- 1 Device 86, lockout relay LOR, 5 decks, 20 contacts
- 6 Test switch with rear wired connection and semi-flush mount, 10-pole (ABB required)


REFERENCE: Georgia, Kennedy and College St Substations

- 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)
- 1 ION 7650 Transducer (SQD# METSEION92040)
- 1 Shark® 100-60-10-V2-D2-485P-X
- 1 SEL 787 Transformer Protection Relay (07871X1ACACAA5850220, 787#GTKF)
- 1 INCON Tap position monitor 1250B-1-S
- 1 Beckwith Digital Tap changer Control (M-2001C-6SL)
- 1 SEL-487B with Conventional Secondary Inputs (0487B1X4X52XC0XEH9EEEEEX, 487B#PNKP)
- 3 Cable lugs, 500 MCM
- 3 Set cover boots
- 1 Lot nameplates

(1) BUS TIE circuit breaker equipment set, each to include:

- Circuit breaker cell rated 3000 ampere with closed door racking provision, viewing window, integral light and remote switch, riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
- Silver plated copper tie bus assembly rated 3000A
- Epoxy bus standoff assembly
- 1 **PowlVac drawout vacuum circuit breaker rated 15kV, 3000A, 25kA with closed door racking provision, 15PV25, with 3 "a" & 3 "b" contacts**
- Circuit breaker switch, MOC 13 circuit (7 a & 6 b)
- Circuit breaker switch, TOC 13 circuit (7 a & 6 b)
- Shutter position indicator
- Door provision for electrical racking device
- 1 Molded Case Circuit Breaker disconnect, 125VDC, 2 pole
- 1 Set close circuit disconnect fuse block with fuses
- 1 Set trip circuit disconnect fuse block with solid link
- 3 Set relay circuit disconnect fuse block with fuses
- 6 Current transformers, multi ratio, high burden
- 1 Control switch, open/close
- 3 Indicating lights LED type
- 3 Test switch with rear wired connection and semi-flush mount, 10-pole
- 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)
- 1 Lot nameplates



REFERENCE: Georgia, Kennedy and College St Substations

(9) FEEDER circuit breaker equipment sets, each to include:

- Circuit breaker cell rated 1200 ampere with closed door racking provision, viewing window, integral light and remote switch, riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
- Silver plated copper runback bus assembly rated 1200A with boots
- Epoxy bus standoff assembly
- 1 PowlVac drawout vacuum circuit breaker rated 15kV, 1200A, 25kA with closed door racking provision, 15PV25, with 3 "a" & 3 "b" contacts**
- Circuit breaker switch, MOC 13 circuit (7 a & 6 b)
- Circuit breaker switch, TOC 13 circuit (7 a & 6 b)
- Shutter position indicator
- Door provision for electrical racking device
- 1 Molded Case Circuit Breaker disconnect, 125VDC, 2 pole
- 1 Set close circuit disconnect fuse block with fuses
- 1 Set trip circuit disconnect fuse block with solid link
- 3 Set relay circuit disconnect fuse block with fuses
- 6 Current transformers, multi ratio, high burden
- 1 Control switch, open/close
- 3 Indicating lights LED type
- 3 Test switch with rear wired connection and semi-flush mount, 10-pole (ABB required)
- 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)
- 1 Shark® 100-60-10-V2-D2-485P-X
- 3 Station Class Surge Arresters, 15 kV, polymer
- 3 Cable lugs, 750 MCM
- 3 Set cover boots
- 1 Lot nameplates



REFERENCE: Georgia, Kennedy and College St Substations

(2) Arcteq Arc Quencher Systems, each to include:

- 1 Arc Quencher Protective Relay (AQ-110PLV - AQ-110PLV-AABA)
- 1 Arc Flash Sensor Relays (AQ-103 - AQ-103LV)
- 1 AQ System C50 Controller with Ethernet Communications (T4-PAC-C80)
- 1 AQ System 10" Color Touchscreen HMI (T4-PAC-HMI)
- 1 MV Arc Quencher Device with 3AM4 (SiQuench AQD - 3AM4132-1DA12-0AB2-Z)
- 1 Arc Flash Point Light Sensors (AQ-01 (PLS) - AQ-01C-XXX)
- 1 Arc Quencher Assertion Fiber Cables, 3 meter length (AX-001-3)
- 1 Safety+ Annunciator Panel 22mmPL + Siren (T4AQSAF)
- 1 Nexus 1500+ Time-Date SOE Recorder & Power Meter (1500+-D-60-20-V1-X-X-6R01-X)
- 1 RJ-45 External Port (2866763)
- 1 Phoenix Quint Power Supplies (492075)
- 1 Lot nameplates

(1) Set of switchgear accessories to include:

- 1 Manual charging handle
- 1 Circuit breaker racking handle
- 1 Interlock override
- 1 Circuit breaker test cabinet with secondary disconnect plug
- 1 Electrically operated racking device
- 1 Circuit breaker lift truck
- 6 SEL-2814M0 (Configuration# 2814M0)
- 12 SEL-2812 (Configuration# 2812MRX0)
- 12 SEL-2812 (Configuration# 2812MTX0)
- 12 SEL Multimode Fiber-Optic Cable, (C808Z01000X0002, C808#F7JN)



REFERENCE: Georgia, Kennedy and College St Substations

13.2KV METAL CLAD SWITCHGEAR

Tag Number: NORTHWEST SWGR - COLLEGE ST.

One (1) line-up of PowlVac® metal clad switchgear with vacuum circuit breakers designed in accordance with ANSI standards C37.04, C37.06, C37.20.2, and rated as follows:

Maximum Voltage Class:	15 kV
Service Voltage:	13.2 kV
Basic Impulse Level:	95 kV
Power Frequency Withstand:	36 kV
Voltage Range (K factor):	1
Short-circuit Current Rating:	25 kA rms
Close and Latch Capacity:	65 kA Peak
Close Voltage:	125 VDC
Trip Voltage:	125 VDC
Frequency:	60 Hz

(14) Vertical sections of metal clad switchgear each with the following common features:

- Indoor enclosure, NEMA 1, 11 gauge steel
- Basic one high construction including a standard rear access door as an integral part of the PCR®
- Laminated plastic mimic bus
- 3000A main bus, silver plated copper, 3 phase, 3 wire
- Flame retardant and track resistant Bonded Epoxy bus insulation system
- Epoxy main bus pass through insulators in a glass polyester mounting
- Carbon steel Grade 5 mounting hardware, plated for corrosion protection
- Phase polarity 1 2 3 or A B C, front to back, top to bottom, left to right
- Ground bus, 1/4 x 2, copper with plating to match main bus
- Control terminal blocks, 600 volt, 30 ampere
- Control wiring, 14 gauge, 41 strand, type SIS with VW-1 flame retardant rating
- Control wire termination, insulated, locking fork/spade tongue, crimp type
- Current transformer shorting type terminal blocks
- Current transformer wiring, 10 gauge, 105 strand, type SIS with VW-1 flame retardant rating
- Current transformer wire termination, insulated, ring tongue, crimp type
- Wire harnesses
- Common DC bus #8 AWG SIS wire with seamless ring tongue terminations
- Raised profile nameplates with nylon push-in fasteners
- Wiremarkers, sleeve type
- Enclosure space heater with expanded metal cage, rated 240VAC, energized @ 120VAC



REFERENCE: Georgia, Kennedy and College St Substations

- Barrier behind the instrument compartment doors
- Textured powder coat paint finish
- ANSI-61, light gray exterior with white instrument panels

(1) Set of enclosure options:

- 1 Space heater circuit with MCCB supply disconnect, thermostat and bypass switch
- 2 Ground cable lugs (4/0)
- 2 Bus duct terminations 3000A, Top Entry

(2) Sets incoming line voltage monitoring equipment, each to include:

- Roll-out assembly complete with primary & secondary fuses
- 3 Voltage transformers, 8400:120 volt

(1) Set switchgear main bus voltage monitoring equipment, each to include:

- Roll-out assembly complete with primary & secondary fuses
- 3 Voltage transformers, 8400:120 volt

(2) (NWT1, NWT2) MAIN circuit breaker equipment sets, each to include:

- Circuit breaker cell rated 3000 ampere with closed door racking provision, viewing window, integral light and remote switch, riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
- Silver plated copper runback bus assembly rated 3000A with boots
- Epoxy bus standoff assembly
- 1 **PowlVac drawout vacuum circuit breaker rated 15kV, 3000A, 25kA with closed door racking provision, 15PV25, with 3 "a" & 3 "b" contacts**
- Circuit breaker switch, MOC 13 circuit (7 a & 6 b)
- Circuit breaker switch, TOC 13 circuit (7 a & 6 b)
- Shutter position indicator
- Door provision for electrical racking device
- 1 Set close circuit disconnect fuse block with fuses
- 1 Set trip circuit disconnect fuse block with solid link
- 2 Set relay circuit disconnect fuse block with fuses
- 6 Current transformers, multi ratio, high burden
- 1 Control switch, open/close
- 3 Indicating lights LED type
- 1 Device 86, lockout relay LOR, 5 decks, 20 contacts
- 6 Test switch with rear wired connection and semi-flush mount, 10-pole (ABB required)


REFERENCE: Georgia, Kennedy and College St Substations

- 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)
- 1 ION 7650 Transducer (SQD# METSEION92040)
- 1 Shark® 100-60-10-V2-D2-485P-X
- 1 SEL 787 Transformer Protection Relay (07871X1ACACAA5850220, 787#GTKF)
- 1 INCON Tap position monitor 1250B-1-S
- 1 Beckwith Digital Tap changer Control (M-2001C-6SL)
- 1 SEL-487B with Conventional Secondary Inputs (0487B1X4X52XC0XEH9EEEEEX, 487B#PNKP)
- 3 Cable lugs, 500 MCM
- 3 Set cover boots
- 1 Lot nameplates

(12) FEEDER circuit breaker equipment sets, each to include:

- Circuit breaker cell rated 1200 ampere with closed door racking provision, viewing window, integral light and remote switch, riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
- Silver plated copper runback bus assembly rated 1200A with boots
- Epoxy bus standoff assembly
- 1 **PowlVac drawout vacuum circuit breaker rated 15kV, 1200A, 25kA with closed door racking provision, 15PV25, with 3 "a" & 3 "b" contacts**
- Circuit breaker switch, MOC 13 circuit (7 a & 6 b)
- Circuit breaker switch, TOC 13 circuit (7 a & 6 b)
- Shutter position indicator
- Door provision for electrical racking device
- 1 Molded Case Circuit Breaker disconnect, 125VDC, 2 pole
- 1 Set close circuit disconnect fuse block with fuses
- 1 Set trip circuit disconnect fuse block with solid link
- 3 Set relay circuit disconnect fuse block with fuses
- 6 Current transformers, multi ratio, high burden
- 1 Control switch, open/close
- 3 Indicating lights LED type
- 3 Test switch with rear wired connection and semi-flush mount, 10-pole (ABB required)
- 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)
- 1 Shark® 100-60-10-V2-D2-485P-X
- 3 Station Class Surge Arresters, 15 kV, polymer
- 3 Cable lugs, 750 MCM
- 3 Set cover boots
- 1 Lot nameplates



REFERENCE: Georgia, Kennedy and College St Substations

(1) Arcteq Arc Quencher Systems, each to include:

- 1 Arc Quencher Protective Relay (AQ-110PLV - AQ-110PLV-AABA)
- 1 Arc Flash Sensor Relays (AQ-103 - AQ-103LV)
- 1 AQ System C50 Controller with Ethernet Communications (T4-PAC-C80)
- 1 AQ System 10" Color Touchscreen HMI (T4-PAC-HMI)
- 1 MV Arc Quencher Device with 3AM4 (SiQuench AQD - 3AM4132-1DA12-0AB2-Z)
- 1 Arc Flash Point Light Sensors (AQ-01 (PLS) - AQ-01C-XXX)
- 1 Arc Quencher Assertion Fiber Cables, 3 meter length (AX-001-3)
- 1 Safety+ Annunciator Panel 22mmPL + Siren (T4AQ SAP)
- 1 Nexus 1500+ Time-Date SOE Recorder & Power Meter (1500+-D-60-20-V1-X-X-6R01-X)
- 1 RJ-45 External Port (2866763)
- 1 Phoenix Quint Power Supplies (492075)
- 1 Lot nameplates

(1) Set of switchgear accessories to include:

- 1 Manual charging handle
- 1 Circuit breaker racking handle
- 1 Interlock override
- 1 Circuit breaker test cabinet with secondary disconnect plug
- 1 Electrically operated racking device
- 1 Circuit breaker lift truck
- 6 SEL-2814M0 (Configuration# 2814M0)
- 12 SEL-2812 (Configuration# 2812MRX0)
- 12 SEL-2812 (Configuration# 2812MTX0)
- 12 SEL Multimode Fiber-Optic Cable, (C808Z01000X0002, C808#F7JN)



REFERENCE: Georgia, Kennedy and College St Substations

13.2kV Metal Clad Switchgear
Tag Number: WEST SWGR - COLLEGE ST.

One (1) line-up of PowlVac® metal clad switchgear with vacuum circuit breakers designed in accordance with ANSI standards C37.04, C37.06, C37.20.2, and rated as follows:

Maximum Voltage Class:	15 kV
Service Voltage:	13.2 kV
Basic Impulse Level:	95 kV
Power Frequency Withstand:	36 kV
Voltage Range (K factor):	1
Short-circuit Current Rating:	25 kA rms
Close and Latch Capacity:	65 kA Peak
Close Voltage:	125 VDC
Trip Voltage:	125 VDC
Frequency:	60 Hz

(14) Vertical sections of metal clad switchgear each with the following common features:

- Indoor enclosure, NEMA 1, 11 gauge steel
- Basic one high construction including a standard rear access door as an integral part of the PCR®
- Laminated plastic mimic bus
- 3000A main bus, silver plated copper, 3 phase, 3 wire
- Flame retardant and track resistant Bonded Epoxy bus insulation system
- Epoxy main bus pass through insulators in a glass polyester mounting
- Carbon steel Grade 5 mounting hardware, plated for corrosion protection
- Phase polarity 1 2 3 or A B C, front to back, top to bottom, left to right
- Ground bus, 1/4 x 2, copper with plating to match main bus
- Control terminal blocks, 600 volt, 30 ampere
- Control wiring, 14 gauge, 41 strand, type SIS with VW-1 flame retardant rating
- Control wire termination, insulated, locking fork/spade tongue, crimp type
- Current transformer shorting type terminal blocks
- Current transformer wiring, 10 gauge, 105 strand, type SIS with VW-1 flame retardant rating
- Current transformer wire termination, insulated, ring tongue, crimp type
- Wire harnesses
- Common DC bus #8 AWG SIS wire with seamless ring tongue terminations
- Raised profile nameplates with nylon push-in fasteners
- Wiremarkers, sleeve type
- Enclosure space heater with expanded metal cage, rated 240VAC, energized @ 120VAC



REFERENCE: Georgia, Kennedy and College St Substations

- Barrier behind the instrument compartment doors
- Textured powder coat paint finish
- ANSI-61, light gray exterior with white instrument panels

(1) Set of enclosure options:

- 1 Space heater circuit with MCCB supply disconnect, thermostat and bypass switch
- 2 Ground cable lugs (4/0)
- 2 Bus duct terminations 3000A, Top Entry

(1) Set incoming line voltage monitoring equipment, each to include:

- Roll-out assembly complete with primary & secondary fuses
- 3 Voltage transformers, 8400:120 volt

(1) Set switchgear main bus voltage monitoring equipment, each to include:

- Roll-out assembly complete with primary & secondary fuses
- 3 Voltage transformers, 8400:120 volt

(1) TRANSFORMER (T1) MAIN circuit breaker equipment set, each to include:

- Circuit breaker cell rated 3000 ampere with closed door racking provision, viewing window, integral light and remote switch, riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
- Silver plated copper runback bus assembly rated 3000A with boots
- Epoxy bus standoff assembly
- 1 **PowlVac drawout vacuum circuit breaker rated 15kV, 3000A, 25kA with closed door racking provision, 15PV25, with 3 "a" & 3 "b" contacts**
- Circuit breaker switch, MOC 13 circuit (7 a & 6 b)
- Circuit breaker switch, TOC 13 circuit (7 a & 6 b)
- Shutter position indicator
- Door provision for electrical racking device
- 1 Set close circuit disconnect fuse block with fuses
- 1 Set trip circuit disconnect fuse block with solid link
- 2 Set relay circuit disconnect fuse block with fuses
- 6 Current transformers, multi ratio, high burden
- 1 Control switch, open/close
- 3 Indicating lights LED type
- 1 Device 86, lockout relay LOR, 5 decks, 20 contacts
- 6 Test switch with rear wired connection and semi-flush mount, 10-pole (ABB required)


REFERENCE: Georgia, Kennedy and College St Substations

- 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)
- 1 ION 7650 Transducer (SQD# METSEION92040)
- 1 Shark® 100-60-10-V2-D2-485P-X
- 1 SEL 787 Transformer Protection Relay (07871X1ACACAA5850220, 787#GTKF)
- 1 INCON Tap position monitor 1250B-1-S
- 1 Beckwith Digital Tap changer Control (M-2001C-6SL)
- 1 SEL-487B with Conventional Secondary Inputs (0487B1X4X52XC0XEH9EEEEEX, 487B#PNKP)
- 3 Cable lugs, 500 MCM
- 3 Set cover boots
- 1 Lot nameplates

(12) FEEDER circuit breaker equipment sets, each to include:

- Circuit breaker cell rated 1200 ampere with closed door racking provision, viewing window, integral light and remote switch, riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
- Silver plated copper runback bus assembly rated 1200A with boots
- Epoxy bus standoff assembly
- 1 **PowlVac drawout vacuum circuit breaker rated 15kV, 1200A, 25kA with closed door racking provision, 15PV25, with 3 "a" & 3 "b" contacts**
- Circuit breaker switch, MOC 13 circuit (7 a & 6 b)
- Circuit breaker switch, TOC 13 circuit (7 a & 6 b)
- Shutter position indicator
- Door provision for electrical racking device
- 1 Molded Case Circuit Breaker disconnect, 125VDC, 2 pole
- 1 Set close circuit disconnect fuse block with fuses
- 1 Set trip circuit disconnect fuse block with solid link
- 3 Set relay circuit disconnect fuse block with fuses
- 6 Current transformers, multi ratio, high burden
- 1 Control switch, open/close
- 3 Indicating lights LED type
- 3 Test switch with rear wired connection and semi-flush mount, 10-pole (ABB required)
- 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)
- 1 Shark® 100-60-10-V2-D2-485P-X
- 3 Station Class Surge Arresters, 15 kV, polymer
- 3 Cable lugs, 750 MCM
- 3 Set cover boots
- 1 Lot nameplates



REFERENCE: Georgia, Kennedy and College St Substations

(1) TIE FEEDER circuit breaker equipment set, each to include:

- Circuit breaker cell rated 3000 ampere with closed door racking provision, viewing window, integral light and remote switch, riser bus, cell studs, insulated primary spouts, automatic isolating shutters, and cell interlocks as required by ANSI
- Silver plated copper runback bus assembly rated 3000A with boots
- Epoxy bus standoff assembly
- 1 PowlVac drawout vacuum circuit breaker rated 15kV, 3000A, 25kA with closed door racking provision, 15PV25, with 3 "a" & 3 "b" contacts**
- Circuit breaker switch, MOC 13 circuit (7 a & 6 b)
- Circuit breaker switch, TOC 13 circuit (7 a & 6 b)
- Shutter position indicator
- Door provision for electrical racking device
- 1 Molded Case Circuit Breaker disconnect, 125VDC, 2 pole
- 1 Set close circuit disconnect fuse block with fuses
- 1 Set trip circuit disconnect fuse block with solid link
- 3 Set relay circuit disconnect fuse block with fuses
- 6 Current transformers, multi ratio, high burden
- 1 Control switch, open/close
- 3 Indicating lights LED type
- 2 Test switch with rear wired connection and semi-flush mount, 10-pole (ABB required)
- 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)
- 1 SEL-2407 satellite-synchronized clock (24070A03B, 2407#2FJD)
- 1 SEL-953 Coaxial Cable C953#0102
- 1 SEL-3350 Automation Controller (3350#1KP4)
- 1 SEL Feeder Protection Relay (751501ACACA70850620, 751#24KF)
- 3 Station Class Surge Arresters, 15 kV, polymer
- 3 Cable lugs, 750 MCM
- 3 Set cover boots
- 1 Lot nameplates



REFERENCE: Georgia, Kennedy and College St Substations

(1) Arcteq Arc Quencher Systems, each to include:

- 1 Arc Quencher Protective Relay (AQ-110PLV - AQ-110PLV-AABA)
- 1 Arc Flash Sensor Relays (AQ-103 - AQ-103LV)
- 1 AQ System C50 Controller with Ethernet Communications (T4-PAC-C80)
- 1 AQ System 10" Color Touchscreen HMI (T4-PAC-HMI)
- 1 MV Arc Quencher Device with 3AM4 (SiQuench AQD - 3AM4132-1DA12-0AB2-Z)
- 1 Arc Flash Point Light Sensors (AQ-01 (PLS) - AQ-01C-XXX)
- 1 Arc Quencher Assertion Fiber Cables, 3 meter length (AX-001-3)
- 1 Safety+ Annunciator Panel 22mmPL + Siren (T4AQSAP)
- 1 Nexus 1500+ Time-Date SOE Recorder & Power Meter (1500+-D-60-20-V1-X-X-6R01-X)
- 1 RJ-45 External Port (2866763)
- 1 Phoenix Quint Power Supplies (492075)
- 1 Lot nameplates

(1) Set of switchgear accessories to include:

- 1 Manual charging handle
- 1 Circuit breaker racking handle
- 1 Interlock override
- 1 Circuit breaker test cabinet with secondary disconnect plug
- 1 Electrically operated racking device
- 1 Circuit breaker lift truck
- 6 SEL-2814M0 (configuration# 2814M0)
- 12 SEL-2812 (configuration# 2812MRX0)
- 12 SEL-2812 (configuration# 2812MTX0)
- 12 SEL Multimode Fiber-Optic Cable, (C808Z01000X0002, C808#F7JN)



REFERENCE: Georgia, Kennedy and College St Substations

NON-SEGREGATED PHASE BUS DUCT – 41418

Voltage class and amperage	15 kV, 3000 A
Enclosure Size / Material	16" x 33" (aluminum)
Conductor size	(1) 1/2" x 8" Copper F.R.E. bar
Conductor Hardware	Stainless Steel (300 Series)
Conductor finish	Silver-plated ends
Conductor insulation	Epoxy, 40-60 mils thick
Lightning impulse withstand	95 kV (B.I.L.)
Number of phases / wires	3-Phase / 3-Wire
Short time withstand.....	50 kA RMS (Sym.)
Conductor supports.....	molded glass reinforced polyester
Ground bus	1/2" x 2" Copper bar
Enclosure finish	ANSI 61
Ambient / Rise (conductor)	40° C / 65° C
Number of applicable runs	3

Tag Number: Bus 1 W/T1

Quantity	U/M	Description
140	Ft.	Bus duct
3	Ea.	Vertical elbows
0	Ea.	Horizontal elbows
1	Ea.	Wall seal assembly (1/2 hr. Fire rated)
1	Ea.	T-tap
1	Ea.	Transformer termination Adapter bars, Flexible braids, Bolting hardware, Termination boots, and Termination box.
2	Ea.	Switchgear termination Adapter bars, Flexible braids, Bolting hardware, and Termination boots.
3	Ea.	Housing ground pads
1	Lot	500W, 240V Internal heaters (operating at 120V)
1	Ea.	Thermostat (adjustable design)
1	Ea.	Laminated nameplate



REFERENCE: Georgia, Kennedy and College St Substations

Tag Number: Bus 2 W/T2

Quantity	U/M	Description
195	Ft.	Bus duct
5	Ea.	Vertical elbows
1	Ea.	Horizontal elbows
1	Ea.	Wall seal assembly (1/2 hr. Fire rated)
1	Ea.	T-tap
1	Ea.	Transformer termination Adapter bars, Flexible braids, Bolting hardware, Termination boots, and Termination box.
2	Ea.	Switchgear termination Adapter bars, Flexible braids, Bolting hardware, and Termination boots.
3	Ea.	Housing ground pads
1	Lot	500W, 240V Internal heaters (operating at 120V)
1	Ea.	Thermostat (adjustable design)
1	Ea.	Laminated nameplate

Tag Number: Bus 3

Quantity	U/M	Description
140	Ft.	Bus duct
2	Ea.	Vertical elbows
2	Ea.	Horizontal elbows
1	Ea.	Wall seal assembly (1/2 hr. Fire rated)
1	Ea.	Transformer termination Adapter bars, Flexible braids, Bolting hardware, Termination boots, and Termination box.
1	Ea.	Switchgear termination Adapter bars, Flexible braids, Bolting hardware, and Termination boots.
2	Ea.	Housing ground pads
1	Lot	500W, 240V Internal heaters (operating at 120V)
1	Ea.	Thermostat (adjustable design)
1	Ea.	Laminated nameplate



REFERENCE: Georgia, Kennedy and College St Substations

UNIT ADD/DELETE PRICES

Description	U/M	Add Price	Delete Price
Bus Duct	Ft.	\$952	\$571
Vertical Elbow	Ea.	\$1,190	\$714
Horizontal Elbow	Ea.	\$1,666	\$1,000

Optional spare parts list (for commissioning and plant start-up)

Part Number:	Description:	QTY	U/M	Unit Price	Extension
11501001	Neoprene – Thin Gasket	4	Roll	\$100	\$400.00
11501002	Neoprene – Wide Gasket	4	Roll	\$100	\$400.00
12301002	Bus Duct Heater	5	Ea.	\$125	\$625.00
UP1082	MGRP Bus Support	5	Ea.	\$75	\$375.00

Total lot net price **\$1800.00**

Optional spare parts list (for two (2) years of operation)

Part Number:	Description:	QTY	U/M	Unit Price	Extension
11501001	Neoprene – Thin Gasket	8	Roll	\$100	\$800.00
11501002	Neoprene – Wide Gasket	8	Roll	\$100	\$800.00
12301002	Bus Duct Heater	10	Ea.	\$125	\$1,250.00
UP1082	MGRP Bus Support	10	Ea.	\$75	\$750

Total lot net price **\$3,600.00**



REFERENCE: Georgia, Kennedy and College St Substations

COMMENTS and CLARIFICATIONS

Commercial & technical comments, clarifications and exceptions will be detailed in either:

- Powell's standard Clarification Log SAE-FO-033, or
- The customer supplied clarification log which was provided with the RFP

The applicable clarification log will accompany this proposal as a separate attachment and shall be referenced as a part of any resulting contract or purchase order.


REFERENCE: Georgia, Kennedy and College St Substations
COMMERCIAL SUMMARY

Power Control Room (PCR) - GEORGIA STREET T1 PCR	\$367,321.00
Fire Systems - GEORGIA ST T1	\$11,635.00
Battery - GEORGIA ST T1	\$37,493.00
Stairs/Landings Etc. - GEORGIA ST T1	\$42,068.00
Powlvac Switchgear and Accessories T1 SWGR - GEORGIA ST.....	\$1,081,615.00
Power Control Room (PCR) - GEORGIA STREET T3 PCR	\$367,321.00
Fire Systems GEORGIA ST T3.....	\$11,635.00
Battery GEORGIA ST T3.....	\$37,493.00
Stairs/Landings Etc.- GEORGIA ST T3.....	\$42,068.00
Powlvac Switchgear and Accessories T3 SWGR - GEORGIA ST.....	\$1,117,923.00
Power Control Room (PCR) - GEORGIA STREET WEST PCR.....	\$346,423.00
Fire Systems - GEORGIA ST WEST	\$11,635.00
Battery - GEORGIA ST WEST	\$37,493.00
Stairs/Landings Etc.- GEORGIA ST WEST	\$42,068.00
Powlvac Switchgear and Accessories WEST SWGR - GEORGIA ST.	\$966,133.00
Freight	\$152,944.00
Field Service Installation	\$92,984.00
GEORGIA STREET T1, T3, AND WEST TOTAL.....	\$4,766,252.00

Power Control Room (PCR) - KENNEDY STREET T11 PCR.....	\$400,915.00
Fire Systems - KENNEDY ST T11	\$11,635.00
Battery - KENNEDY ST T11	\$37,493.00
Stairs/Landings Etc. - KENNEDY ST T11	\$42,068.00
Powlvac Switchgear and Accessories T11 SWGR - KENNEDY ST.....	\$1,241,011.00
Freight	\$61,182.00
Field Service Installation	\$36,728.00
KENNEDY STREET T11 TOTAL	\$1,831,032.00

**REFERENCE: Georgia, Kennedy and College St Substations**

Powlvac Switchgear and Accessories EAST SWGR - COLLEGE ST.	\$1,792,447.00
Powlvac Switchgear and Accessories NW SWGR - COLLEGE ST.	\$1,616,096.00
Powlvac Switchgear and Accessories WEST SWGR - COLLEGE ST.	\$1,580,311.00
3000A, 15kV Bus 1 w.T1	\$164,210.00
3000A, 15kV Bus 2 w.T2	\$223,625.00
3000A, 15kV Bus 3	\$157,981.00
Freight	\$80,157.00
Field Service Installation	\$80,411.00

COLLEGE ST. TOTAL\$5,695,238.00

GRAND TOTAL\$12,292,522.00

Freight/Risk Transfer:**Freight Prepaid: FOB Gate at customer jobsite**

(INCOTERMS 2020 – freight prepaid and added at cost +20%)

Equipment will be delivered FCA to gate at customer site by Powell nominated carrier. Title passes at Powell facility. Risk passes at load out if the customer insures risk of loss. If risk of loss insurance is to be provided by Powell, please add 1% of the project total to the purchase order price.

Good faith pricing for above prepaid freight options based on:

- Gate - to - gate transport only
- Standard heavy haul tractor/trailer configurations with air ride trailers
- Approved routings based on DOT information at time of bid
- Fuel rates at time of bid
- Bucket trucks (if required)
- Permits and Escorts as required by overall weights and dimensions
- Quantity and size of each shipping section at time of bid
- Four hours of free time are included at jobsite, after which \$325 per hour demurrage charges may apply

Pricing for prepaid shipping may be impacted by the following:

- Inability of Powell's designated carrier to transport to an offload location within the customer facility using the standard tractor/trailer configuration which was used as the basis of this estimate



REFERENCE: Georgia, Kennedy and College St Substations

- The requirement for specialized transport equipment such as SPMT's (self-propelled motorized transports) within the customer facility due to tight turn radius or in-plant obstructions.
- Detention/Demurrage charges due to unforeseen re-routing or delays as directed by Department of Transportation, State, or City officials. This may be due to weather conditions, new road construction, traffic accidents, or other factors beyond Powell's knowledge or control at the time of this estimate.
- Significant increases in fuel rates or surcharges.
- Scope and design changes during the project that result in increases to overall weights and dimensions of one or more shipping sections.



REFERENCE: Georgia, Kennedy and College St Substations

TERMS & DELIVERY

General:

Powell's standard Terms and Conditions shall apply to any contract resulting from this quotation, unless negotiated otherwise prior to acceptance of order.

Drawings shall be submitted in Powell's standard format.

Factory acceptance testing of equipment manufactured by Powell shall be per Powell's established ISO QA/QC procedures, and in accordance with applicable IEEE industry standards.

Factory acceptance testing of major buy-out items, if required, shall take place at the factory of origin and at buyer's expense. Major buy-out components may include, but are not limited to: packaged HVAC systems, DC Systems, UPS systems, third-party LV motor control, VFDs, etc.

Project Schedule:

Drawings for Approval:

Submitted 36 to 38 Weeks after acceptance and confirmed agreement of purchase order.

Shipment:

Per RFQ package dates, Powell can comply with PO by 12/15/24

Lead-times for drawings and delivery are based on engineering and shop loading at the time of proposal submission. Lead-times may vary based on actual contract award date. Please contact your Powell Sales Representative to discuss potential expedited drawing or delivery options to meet your specific project needs.

Note: Design/Scope changes during drawing approvals and/or after RTM or Record drawing submittals may result in schedule and/or cost impacts.

Drawings & IOM Manuals:

Powell issues drawings and manuals electronically to a customer specified FTP site, or via Powell Pitstop web based email. Powell generated drawings will be submitted as PDF, but native formats are available upon request. Electronic drawing formats from sub-suppliers will be provided as available from each sub-supplier.



REFERENCE: Georgia, Kennedy and College St Substations

Drawing Submittals:

For all projects, Powell will submit (4) drawing packages. The purpose and content of the packages are explained in order of submittal below.

Approval Drawings:

(See Project Schedule Above for Lead Times)

Approval drawing lead-time is inclusive of our Technical Review Process, which allows Powell to verify that we are in receipt of the latest project design information.

Tech Review will be completed after order entry, but before submittal of approval drawings. Any resulting questions/clarifications will be submitted for customer acceptance and/or response before Powell completes and issues approval drawings.

Release to Manufacturing Drawings:

RTM drawings will incorporate approved-as-noted customer mark-ups after return of approval drawings. This submittal documents that the changes have been captured and incorporated into the final design for released to fabrication.

Record Drawing Package:

The Record drawing package will include:

- All previously submitted drawings with changes incorporated
- Detailed wiring diagrams
- PCR interconnection schedules (if applicable)
- Conduit schedules (if applicable).

Scope changes requested after completion of Record drawing package will be documented on final As-Built drawings which are submitted after shipment.

As-Built Drawings:

Certified As-Built Drawings will reflect the final design and construction of the equipment as it left the Powell factory upon completion.

Drawing Submittal Milestones:

If Powell's commercial offer is of interest, durations and timeline for the above submittals can be provided upon request, along



REFERENCE: Georgia, Kennedy and College St Substations

with an overall project schedule.

Pricing: Pricing is firm through Powell's quoted drawing and delivery schedule.

Taxes and Duties: None included in base proposal.

Terms of Payment: Net (45) days from invoice date.

Milestone Billing: The following progress payments are applicable to this proposal:

20% : At Order Acceptance
25% : At Approval Drawing Submittal
35% : At Release to Manufacture (RTM)
20% : At Ship

Cancellation Charges: The following cancellation percentages are applicable to this proposal:

25% : After Order Acceptance
50% : After Submittal of Approval Drawings
90% : After Release to Manufacture
100% : After Start of Fabrication

Shipping Preparation: Standard domestic preparation is included in quoted price.

Warranty: Powell standard warranty, 12 months from energization or 18 months from date of shipment, whichever occurs first.

Note: Extended warranty terms available upon request. Please contact your Powell Sales Executive for more information.

Spare Parts Quotation: Will be supplied upon completion of customer approved bill of material.

Customer Witness Testing: (15) Standard testing days (virtual or onsite), Monday thru Friday, included in quoted price. Additional days, if requested, will be billed at \$2,500 per day.

Custom or non-standard testing scenarios can be accommodated. Please consult your Powell Sales Representative for details for pricing.



REFERENCE: Georgia, Kennedy and College St Substations

Field Services:

Not included in quoted scope of supply. Please refer to attached Powell Field Service Rate Schedule.

For Proposals that specify a split-PCR shipment, Powell recommends that a factory certified technician be present in an advisory capacity to the installing contractor during re-assembly. Please provide advance notice of 7-10 working days, allowing Powell adequate time to schedule a technician for this service at your site.

Thank you for the opportunity for Powell to serve you. Should you have any questions or additional requirements please contact me.

Submitted by:

Matt Smith
Sales Representative
713.947.4656
Matt.smith@powellind.com



REFERENCE: Georgia, Kennedy and College St Substations

Excusable Delay

“Purchaser acknowledges and agrees that performance of the contract by Powell Industries, Inc., and its subsidiaries including, without limitation, Powell Electrical Systems, Inc., Powell Canada, Inc., Powell (UK) Ltd, Powell (Middle East) B.V. and Powell Industries Asia Pte, Ltd (collectively “Powell”) may be impacted by the current COVID-19 pandemic . The extent of the impact on Powell’s performance is not yet known, however, because this pandemic is now a reasonably foreseeable event and could be construed as not being an event of Force Majeure going forward, the Parties agree to the following:

Powell specifically disclaims and shall not be responsible or liable for any failure or delay in its delivery/performance obligations under the contract to the extent that such failure or delay is caused by the COVID-19 pandemic including, without limitation, delays caused by Powell’s or its subcontractors/sub-supplier’s shortages for labor and/or material, transportation and/or the following of any federal, state/provincial, local governmental or agency advice or orders in protecting the health, safety and wellbeing of people. Powell will use commercially reasonable efforts to mitigate the effect of COVID-19 on its delivery/performance obligations; provided, however, in the event COVID-19 does hinder, prevent or delay Powell’s delivery/performance obligations, Powell shall be entitled to extend the delivery/performance date by the same number of days as the duration of the delay caused by COVID-19, plus a reasonable number of days to remobilize. In the event that COVID-19 delays Powell’s performance of the contract for a continuous period of more than six (6) calendar months, the contract may be terminated by Purchaser by giving ten (10) days written notice to Powell; provided, however, that such termination shall be treated as a termination for Purchaser’s convenience whereby Powell is paid for all work performed (including work in process plus reasonable absorbed overhead and profit) and its cost for non-returnable inventory held for work in process within forty-five (45) days of such termination. Powell will not be entitled to anticipatory profit on work not performed.”



Standard Conditions of Sale

Sale of any of the equipment or services described or referred to in any quotation at the quoted prices is expressly conditioned upon the terms and conditions set forth below. Any purchase order for or any statement of intent to purchase any such equipment or services, or any direction to proceed with engineering, procurement, manufacture or shipment, shall constitute assent to these terms and conditions and a representation that the Purchaser is solvent. Powell Electrical Systems, Inc. (the "Company") will accept orders submitted on the Purchaser's purchase order form or other communication containing terms or conditions in addition to, different from or inconsistent with the terms and conditions contained herein only upon the condition that together with the price and payment information, the identification of the equipment or services involved and any technical specifications for the equipment agreed upon by the Company, the terms and conditions contained herein shall nevertheless be the sole commercial terms and conditions of the agreement between the parties. The Company objects to and rejects any inconsistent, additional or different terms or conditions set forth in any purchase order or other communication from the Purchaser and those additional, different and inconsistent terms shall not be included in any agreement between the parties or binding on Company unless expressly and specifically agreed to in writing by a duly authorized representative of the Company.

WARRANTY

The Company warrants to the Purchaser that Purchaser will have good title to the equipment delivered hereunder, that the equipment to be delivered hereunder is new, unless otherwise stated, and that subject to the conditions below, the equipment will be free from defects in material or workmanship and will conform to specifications as separately approved in writing by Company. The Company warrants to the Purchaser that services, if any, will be performed in a good and workmanlike manner.

The warranty of performance, if any, and against defects in equipment and/or for services shall apply only to issues for which the Company receives written notice of during the applicable warranty period that appear during proper operation in normal use and service and which are due to causes other than those excluded below. For equipment that is not installed by the Company, this warranty period is eighteen (18) months from the date of shipment by the Company or twelve (12) months from first energization, whichever comes first. For equipment installed by the Company and/or service work, if any, this warranty period is twelve (12) months from the completion of installation or the services, as applicable, provided same is not unreasonably delayed by the Purchaser. The date and conditions of any tests shall be mutually agreed upon by Company and Purchaser.

Provided that the Company has timely received written notice of a valid warranty claim, the Company shall thereupon correct any defect or remedy any performance failure, either (at its option) by repairing any defective or damaged parts of the equipment at the Company plant or at the location of the equipment, or by making available at the Company's plant necessary repaired or replacement parts. The Purchaser shall be responsible for providing "free and clear" access to the affected portion of the equipment and any required costs for shipping the equipment or the parts to the Company plant for all Company corrective work. The liability of the Company under this warranty (except as to title), or for any loss or damage to the equipment whether the claim is based on contract or tort (including negligence), shall not in any case exceed the cost of correcting defects in the equipment and for services the Company's cost of reperforming the services, as herein provided and upon the expiration of the warranty period all such liability shall terminate.

These warranties and remedies are applicable only to the extent Purchaser's receipt, handling, storage, installation, testing, operation and maintenance, including tasks incident thereto, of the equipment are in accordance with the recommendations of the Company; and, such equipment shall not have been operated in excess of limitations specified by Company and not have been subjected to accident, alteration, abuse or misuse. Company expressly excludes any warranty for defect or failure of performance caused by erosion, corrosion or normal wear and tear. With respect to equipment or parts delivered under the agreement, Purchaser agrees to accept responsibility for (i) their selection to achieve Purchaser's intended results, (ii) their use of the item and their non-use of any feature thereof, (iii) the results obtained therefrom and (iv) the selection of, use of and results obtained from any equipment, programs or services not provided by Company and used in connection with items delivered hereunder.

THE WARRANTIES AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES AND REMEDIES, WHETHER WRITTEN, ORAL, IMPLIED OR STATUTORY (EXCEPT AS TO TITLE). THE COMPANY DISCLAIMS AND MAKES NO OTHER WARRANTIES TO PURCHASER, PURCHASER'S CUSTOMERS OR ANY OTHER PERSON OR ENTITY REGARDING THE EQUIPMENT, WORK, GOODS, ENGINEERING AND DESIGN SERVICES, FIELD INSTALLATION SERVICES OR ANY OTHER GOODS OR SERVICES PROVIDED UNDER THESE TERMS AND CONDITIONS AND EXPRESSLY DISCLAIMS ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION:

DELIVERY

THE IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, PERFORMANCE, SUITABILITY AND THE ABSENCE OF REDHIBITORY DEFECTS; (1) ANY WARRANTIES RELATING TO PURCHASER-SPECIFIED THIRD-PARTY PARTS, COMPONENTS, PRODUCTS, SOFTWARE OR SERVICES; (3) ANY WARRANTIES RELATING TO LATENT DEFECT(S) AND/OR (4) ANY WARRANTIES THAT THE SERVICES, FIRMWARE OR SOFTWARE, IF ANY, WILL BE PROVIDED WITHOUT INTERRUPTION OR ERROR.

INTELLECTUAL PROPERTY

Except as set forth below, the Company shall defend any suit or proceeding brought against the Purchaser to the extent based on a claim that any equipment, or any part thereof, furnished under this contract constitutes an infringement of any patent of the United States, if notified promptly in writing and given authority, information and assistance (at the Company's expense) for the defense of same, and the Company shall pay all damages and costs awarded therein against the Purchaser. In case said equipment, or any part thereof, is in such suit held to constitute infringement and the use of said equipment or parts is enjoined, the Company shall, at its own expense and at its option, either procure for the Purchaser the right to continue using said equipment or part; or replace same with non-infringing equipment; or modify it so it becomes non-infringing; or remove said equipment and refund the purchase price and the transportation and installation costs thereof. The foregoing states the entire liability of the Company for patent infringement by said equipment or any part thereof.

The preceding paragraph shall not apply to any equipment or part thereof provided by the Purchaser or manufactured according to the Purchaser furnished or specified design and/or third party parts or goods to be incorporated into the Equipment by Company. As to any such design, product, part, or use in such combination, the Company assumes no liability whatsoever for patent infringement and the Purchaser shall indemnify, defend, and hold Company harmless against any damages, expenses, costs, reasonable attorney's fees, or losses resulting from any legal action or claim made against Company, either severally or jointly with Purchaser, or any suit or proceeding based thereon, for infringement (either direct or contributory) of patents, trademarks, or for unfair competition or misappropriation of trade secrets based upon or arising from (1) compliance with Purchaser's designs, specifications, or instructions; (2) the use of any item furnished hereunder, in combination with goods not supplied by Company, or (3) in connection with a manufacturing or other process utilizing any item, or part thereof.

Equipment or any parts thereof sold hereunder may be protected by intellectual property rights of the Company, including but not limited to, rights under issued and pending patents, mask work rights, copyright rights, trademark rights and trade secret rights. Neither the sale of items or any parts thereof hereunder nor the provision by Company of any supporting or related documentation, technical information or advice shall confer on Purchaser any license, express or implied, under any intellectual property rights of Company covering or relating to (1) apparatus or circuits in which the items or parts thereof may be used; (2) a process, machine, use or application in connection with which the items or parts thereof may be used; (3) the process of their manufacture; or (4) a combination in which the items or parts hereof may be used. **COMPANY MAKES NO WARRANTY, EXPRESS OR IMPLIED, THAT THE USE OF ITS EQUIPMENT OR PRODUCTS WILL NOT INFRINGE ITS INTELLECTUAL PROPERTY RIGHTS OR THE RIGHTS OF THIRD PARTIES WITH RESPECT TO ANY PARTICULAR USE OR APPLICATION AND SPECIFICALLY DISCLAIMS ANY AND ALL LIABILITY ARISING OUT OF ANY SUCH USE OR APPLICATION, INCLUDING BUT NOT LIMITED TO, CONSEQUENTIAL OR INCIDENTAL DAMAGES.**

Shipping dates are approximate and are based upon prompt receipt of all



Standard Conditions of Sale

payments due and necessary information from the Purchaser. Unless otherwise specified by the Company and at additional cost to the Purchaser, delivery will be made in accordance with Incoterms 2020 FCA Company's facility. Risks of loss or damage and title shall pass to the Purchaser upon delivery.

The Company shall not be liable for delays in delivery or in performance or failure to manufacture or deliver, due to (1) causes beyond its reasonable control, or (2) acts of God, acts or inactions of the Purchaser, acts of civil or military authority, priorities, fires, strikes or other labor disturbances, floods, storms, severe weather events, epidemics, war, riot, delays in transportation, or railcar or vessel shortages, or (3) inability on account of causes beyond its reasonable control to obtain necessary labor, materials, components, or manufacturing facilities. In the event of any such delay, the date of delivery or of performance shall be extended for a period equal to the time lost by reason of the delay plus a reasonable number of days to remobilize.

PAYMENTS

Pro rata payments shall become due as shipments are made and/or agreed milestones are reached. If shipments are delayed by the Purchaser, payments based on shipments shall become due on the date when the Company is prepared to make shipment. If the work to be performed hereunder is delayed by the Purchaser, payments shall be made based on the purchase price and the percentage of completion. Equipment held for the Purchaser shall be at the risk and expense of the Purchaser.

If the financial condition of the Purchaser at any time does not, in the judgment of the Company, justify continuance of the work to be performed by the Company hereunder on the terms of payment agreed upon, the Company may require full or partial payment in advance or shall be entitled to cancel any order then outstanding and shall receive reimbursement for its reasonable and proper cancellation charges as set forth below. In the event of bankruptcy or insolvency of the Purchaser or in the event any proceeding is brought against the Purchaser, voluntarily or involuntarily, under the bankruptcy or any insolvency laws, the Company shall be entitled to cancel any order then outstanding at any time during the period allowed for filing claims against the estate and shall receive reimbursement for its reasonable and proper cancellation charges as set forth below. The rights of the Company under this paragraph are cumulative and in addition to all rights available to the Company at law or in equity.

SALES AND SIMILAR TAXES

The Company's prices do not include sales, use, excise or similar taxes. Purchaser shall be responsible for all sales, use, excise and similar taxes and shall promptly reimburse Company for any such taxes it is required to pay or advance; provided, however, Company's invoices shall separately itemize all sales and use taxes included in any amounts due from Purchaser, and Company will not collect or remit such taxes (to the extent Company is legally able to do) if Purchaser presents Company with valid exemption or direct payment certificates or other appropriate documentation evidencing that Purchaser will itself pay taxes directly to the appropriate authority(ies) or its exempt from payment of taxes.

DISCLOSURE OF INFORMATION

Any information, suggestions or ideas transmitted by Purchaser to the Company in connection with performance hereunder are not to be regarded as secret or submitted in confidence except as may be otherwise provided in a writing signed by a duly authorized representative of the Company. Purchaser agrees not to use or disclose drawings, specifications, technical information or other data furnished by Company and identified by Company as confidential or proprietary data without the prior written consent of Company. Purchaser agrees and acknowledges that any improvement or modification to such confidential or proprietary data shall be the sole property of Company, regardless of whether any such improvement or modification was the creation of Purchaser. Purchaser further agrees to use all appropriate copyright and proprietary notices on all items delivered hereunder regardless of their intended use. Purchaser recognizes that such proprietary data is unique and consents to the remedy of injunction in addition to damages for violation of these provisions. Nothing in this clause, however, shall restrict

other sources.

CANCELLATION

The Purchaser may only cancel this order for convenience upon ten (10) days written notice, and upon payment by Purchaser to Company of the cancellation charges specified in the Company's quotation or proposal. If no cancellation charges are specified in the Company's quotation or proposal, then the Purchaser shall pay reasonable and proper cancellation charges, which shall include, without limitation, cancellation charges the Company incurs to its suppliers and subcontractors, costs of materials incurred through to the date of cancellation, charges for labor for work done through the date of cancellation (both of which shall include work in progress), and reasonable absorbed overhead and profit on all such materials and labor.

INDEMNITY

COMPANY SHALL NOT BE LIABLE OR RESPONSIBLE FOR, AND PURCHASER, AT ITS OWN EXPENSE, AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, SHALL INDEMNIFY, HOLD HARMLESS AND DEFEND COMPANY FROM AND AGAINST, ANY AND ALL SUITS, ACTIONS, LOSSES, DAMAGES, CLAIMS OR LIABILITY OF ANY CHARACTER, TYPE OR DESCRIPTION, INCLUDING, WITHOUT LIMITATION, ALL EXPENSES OF LITIGATION, COURT COSTS AND ATTORNEYS' FEES FOR INJURY OR DEATH TO ANY PERSON, OR INJURY TO ANY PROPERTY, RECEIVED OR SUSTAINED BY ANY PERSON OR PERSONS OR PROPERTY, ARISING OUT OF, OR OCCASIONED BY, DIRECTLY OR INDIRECTLY (I) THE FAILURE OR DEFECTIVENESS OF ANY ITEM FURNISHED BY COMPANY HEREUNDER, INCLUDING CLAIMS AND DAMAGES ARISING IN WHOLE OR IN PART FROM THE NEGLIGENCE OF COMPANY, OR (II) THE USE OR MISUSE OR NONUSE BY PURCHASER, PURCHASER'S EMPLOYEES, PURCHASER'S CUSTOMERS OR OTHERS OF ANY ITEM OR ANY FEATURE THEREOF FURNISHED BY COMPANY HEREUNDER. THESE PROVISIONS ARE INTENDED TO INDEMNIFY THE COMPANY AGAINST THE RESULTS OF ITS OWN NEGLIGENCE.

LIMITATION OF LIABILITY

Unless otherwise agreed in writing by a duly authorized representative of the Company, products sold hereunder are not intended for use in connection with any nuclear facility or activity. If so used, the Company disclaims any liability for any nuclear damage, injury or contamination, and Purchaser shall indemnify the Company against any such liability, whether as a result of breach of the contract, warranty, tort (including negligence) or otherwise.

IN NO EVENT, WHETHER AS A RESULT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE, SHALL THE COMPANY OR ITS SUBCONTRACTORS OR SUPPLIERS BE LIABLE FOR ANY SPECIAL, CONSEQUENTIAL, INDIRECT, INCIDENTAL OR PUNITIVE OR PENAL DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFIT OR REVENUES, LOSS OF USE OF THE EQUIPMENT OR ANY ASSOCIATED FACILITIES, DAMAGE TO ANY FACILITIES, COST OF CAPITAL, COST OF SUBSTITUTE PRODUCTS, FACILITIES, SERVICES OR REPLACEMENT POWER, DOWN-TIME COSTS, OR CLAIMS OF PURCHASER'S CUSTOMERS FOR SUCH DAMAGES. Any additional or different terms specifically relating to or addressing the subject matter of this paragraph shall be deemed material alterations within the meaning of Section 2.207(b)(2) of the Texas Business and Commerce Code.

EXCEPT FOR COMPANY'S OBLIGATION TO DELIVER TO PURCHASER FULL LEGAL TITLE TO AND OWNERSHIP OF ALL OR ANY PORTION OF THE EQUIPMENT AND SERVICES, IN NO EVENT, WHETHER AS A RESULT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE, GROSS NEGLIGENCE, INTENTIONAL CONDUCT OR STRICT LIABILITY) OR OTHERWISE, SHALL THE COMPANY'S TOTAL AGGREGATE LIABILITY TO PURCHASER FOR ANY LOSS OR DAMAGE ARISING OUT OF, OR RESULTING FROM, THIS CONTRACT, OR FROM THE COMPANY'S PERFORMANCE OR BREACH, OR FROM THE EQUIPMENT OR SERVICES FURNISHED HEREUNDER, EXCEED THE PRICE OF THE SPECIFIC EQUIPMENT OR SERVICE WHICH GIVES RISE TO

Purchaser's right to use or disclose drawings, specifications, technical information or other data which are to become generally known to the public without the breach of this clause by Purchaser, or are rightfully obtained from



Standard Conditions of Sale

THE CLAIM.

If the Company furnishes Purchaser with advice or other assistance which concerns any products supplied hereunder or any system or equipment in which any such product may be installed and which is not required pursuant to this agreement, the furnishing of such advice or assistance will not subject the Company to any liability, whether in contract, warranty, tort (including negligence) or otherwise.

ANTI-CORRUPTION

Purchaser acknowledges that the Foreign Corrupt Practices Act of the United States ("FCPA"), the Corruption of Foreign Public Officials Act ("CFPOA") of Canada, and the Bribery Act ("BA") of the United Kingdom will or may apply to transactions conducted under this agreement and agrees to comply with the FCPA, CFPOA and BA and any other applicable anti-bribery and/or anti-corruption rules as required. Purchaser agrees that it will not engage in any of the following activities in connection with this agreement: (A) offer, promise, or give any financial or other advantage to any persons (public or private); (i) in order to induce a person to improperly perform a relevant function or duty, or (ii) to reward a person for such improper activity, or (iii) where the person knows or believes that the acceptance of the advantage is itself an improper performance of a function or duty; or (B) offer, promise, or give any financial or other advantage to a public official, either directly or through a third party intermediary, with the intent to obtain or retain business or an advantage in the conduct of business by either; (i) influencing the official in his/her official capacity, (ii) inducing such foreign official to do or omit to do any act in violation of his/her lawful duties, (iii) securing any improper advantage, or (iv) inducing the official to use his/her influence with a government or instrumentality thereof to affect or influence any act or decision of such government or instrumentality.

Purchaser shall (a) maintain, throughout the duration of dealings between the parties, its own anti-corruption policies and procedures, including without limitation, adequate procedures designed to ensure that the party complies with the FCPA, CFPOA and BA, (b) provide a copy of such policies and procedures to the other party on request, and (c) monitor and enforce such policies and procedures as appropriate.

Purchaser shall maintain true, accurate, and complete accounting books and records relating to all of its activities under this agreement. Purchaser shall provide information, documentation and reasonable assistance to Company to support an inquiry or investigation of a suspected violation of the FCPA, CFPOA and/or BA.

Company may immediately terminate this contract or suspend its performance under this contract if it has reasonable belief that the other party has breached its compliance with these anti-corruption policies.

GENERAL

The Company represents that any goods to be delivered hereunder will be produced in compliance with the requirements of the Fair Labor Standards Act of 1938, as amended. **The Company represents that it will abide by the requirements of 41 CFR §§ 60-1.4(a), 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientation, gender identity, or national origin. Moreover, these regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, protected veteran status, or disability.**

Any assignment of this agreement or any rights hereunder, by the Purchaser (other than to its customer) without written consent of the Company shall be void.

Purchaser agrees that, with respect to the resale or any other disposition of items sold hereunder, Purchaser shall comply fully with the export control laws and regulations of the United States Government and any applicable laws and regulations of any other country including, but not limited to, the Export Administration Regulations ("EAR") and the International Traffic in Arms Regulations ("ITAR").

The provisions of this agreement are for the benefit of the parties hereto and not for any other person. No understanding, promise or representation, and no waiver, alteration or modification of any of the provisions hereof, shall be binding upon the Company unless agreed to in writing by an authorized representative of the Company. The invalidity, in whole or part, of any of the

provisions in these terms and conditions will not affect the remainder of such paragraph or any other paragraph contained herein.

The purchase order price is based on steel, aluminum, copper and third party material buyout prices in effect on the date of Company's quotation. In the event the prices for any of these materials increases in excess of five percent (5%) from the price for them in effect on the date of quotation, then Company shall be entitled to increase the purchase order price to cover same.

GOVERNING LAW

The agreement, including any Purchase Order, sales confirmation, Company quotation, all aspects of the transactions referenced in the Company's invoice to Purchaser, and any dispute related to any the foregoing, shall be governed by, and interpreted in accordance with the laws of the state of Texas (USA) which shall be the applicable law, without regard to its principles of conflict of laws. The United Nations Convention on Contracts for the International Sales of Goods shall not apply to this agreement.

DISPUTE RESOLUTION

Any dispute arising out of or related to the agreement shall be brought exclusively in federal or state court within Houston, Harris County, Texas. **EACH PARTY HEREBY IRREVOCABLY CONSENTS TO PERSONAL JURISDICTION IN ANY FEDERAL OR STATE COURT OF COMPETENT JURISDICTION LOCATED IN HOUSTON, HARRIS COUNTY, TEXAS AND IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW AND THE LAWS OF THE STATE OF TEXAS, ANY CLAIM OR OBJECTION THAT IT MAY NOW OR HEREAFTER HAVE, THAT VENUE OR PERSONAL JURISDICTION IS NOT PROPER WITH RESPECT TO ANY SUCH DISPUTE. THIS WAIVER SHALL INCLUDE, BUT IS NOT LIMITED TO, ANY CLAIM THAT SUCH DISPUTE BROUGHT IN SUCH COURT HAS BEEN BROUGHT IN AN INCONVENIENT FORUM.** Purchaser agrees that valid service of process of any legal action against it shall be considered in all respects and for all purposes complete and binding on it if copies of all such process are mailed to it at the address appearing on Company's invoice, quotation or sales confirmation by registered mail, return receipt requested.

WAIVER OF JURY TRIAL

EACH PARTY ACKNOWLEDGES AND AGREES THAT ANY DISPUTE ARISING UNDER THIS AGREEMENT IS LIKELY TO INVOLVE COMPLICATED AND TECHNICAL ISSUES AND IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY.

1411829647 (RFP) 15kV Substation Switchgear Projects - Appendix B - Bid Forms

Submit the Response via electronic pdf in accordance with the procedures in the solicitation

Company Name: Switchgear Power Systems LLCCompany's Address: 202 West Enterprise Rd Winneconne WI 54986

License Number: _____

Phone Number: 920-582-7277 FAX No: 920-582-7270 Email Address: Ddiem@switchgearpower.com**BID SECURITY REQUIREMENTS**

- ☒ None required
☐ Certified Check or Bond Five Percent (5%)

TERM OF CONTRACT

- ☐ One Time Purchase
☐ Term -----
☒ Other, Specify - Project Completion

SAMPLE REQUIREMENTS

- ☒ None required
☐ Samples required prior to Bid Opening
☐ Samples may be required subsequent to Bid Opening

SECTION 255.05, FLORIDA STATUTES CONTRACT BOND

- ☒ None required
☐ Bond required 100% of Bid Award

QUANTITIES

- ☐ Quantities indicated are exacting
☒ Quantities indicated reflect the approximate quantities to be purchased Throughout the Contract period and are subject to fluctuation in accordance with actual requirements.

INSURANCE REQUIREMENTS

Insurance required

PAYMENT DISCOUNTS

- ☐ 1% 20, net 30
☐ 2% 10, net 30
☐ Other _____
☒ None Offered

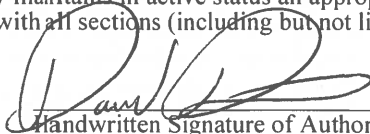
Item No.	ENTER YOUR BID FOR THE FOLLOWING DESCRIBED ARTICLES OR SERVICES:	BID PRICE
1	Georgia Street	\$ <u>4,231,420.00</u>
2	College Street	\$ <u>5,714,275.00</u>
3	Kennedy	\$ <u>1,542,275.00</u>
4	Total Bid Price	\$ <u>11,487,970.00</u>

☒ I have read and understood the Sunshine Law/Public Records clauses contained within this solicitation. I understand that in the absence of a redacted copy my proposal will be disclosed to the public "as-is".

BIDDER CERTIFICATION

By submitting this Bid, the Bidder certifies that it has read and reviewed all of the documents pertaining to this Solicitation, that the person signing below is an authorized representative of the Bidding Company, that the Company is legally authorized to do business in the State of Florida, and that the Company maintains in active status an appropriate contractor's license for the work (if applicable). The Bidder also certifies that it complies with all sections (including but not limited to Conflict Of Interest and Ethics) of this Solicitation.

We have received addenda

1 through 4


Handwritten Signature of Authorized Officer of Company or Agent

12/6/24

Date

David Diem
 Printed Name and Title

Inside Sales

GENERAL

THE MINIMUM QUALIFICATIONS SHALL BE SUBMITTED ON THIS FORM. IN ORDER TO BE CONSIDERED A QUALIFIED BIDDER BY JEA YOU MUST MEET THE MINIMUM QUALIFICATIONS LISTED BELOW, AND BE ABLE TO PROVIDE ALL THE SERVICES LISTED IN THIS SOLICITATION.

THE BIDDER MUST COMPLETE THE BIDDER INFORMATION SECTION BELOW AND PROVIDE ANY OTHER INFORMATION OR REFERENCE REQUESTED. THE BIDDER MUST ALSO PROVIDE ANY ATTACHMENTS REQUESTED WITH THIS MINIMUM QUALIFICATIONS FORM.

BIDDER INFORMATION

COMPANY NAME: Switchgear Power Systems LLC

BUSINESS ADDRESS: 202 W. Enterprise Rd

CITY, STATE, ZIP CODE: Winneconne WI 54986

TELEPHONE: 920-582-7277 Ext 110

FAX: 920-582-7270

E-MAIL: DDiem@switchgearpower.com

PRINT NAME OF AUTHORIZED REPRESENTATIVE: David Diem

SIGNATURE OF AUTHORIZED REPRESENTATIVE: [Signature]

TITLE OF AUTHORIZED REPRESENTATIVE: Inside Sales

MINIMUM QUALIFICATIONS:

Respondent must meet the following Minimum Qualifications to be considered eligible to have its Response evaluated by JEA. Respondent must complete and submit the Minimum Qualification Form provided in this Solicitation. Respondents that are working or have worked for JEA in the past 2 years involving similar work must submit JEA as a reference. JEA reserves the right to ask for additional back up documentation or additional reference projects to confirm the Respondent meets the requirements stated above.

JEA may reject Responses from Respondents not meeting all of the following Minimum Qualifications:

- I. The Respondent must have successfully self-performed similar work preceding the Response Due Date.
 - II. Respondent must not be on the State of Florida Convicted Vendor List, State of Florida's Suspended Vendor List, the City of Jacksonville's Disqualified Vendor List, have their bidding privileges actively suspended by JEA, been debarred by JEA, or have had a contract with JEA was terminated for default within the last two (2) years.
- Bidder must be on the list of JEA's approved manufacturers for Arc-Quenching Switchgear.
 - Current List: Powell Switchgear, Switchgear Power Systems, LLC
 - Bidder shall provide utility references to confirm the successful completion for three (3) projects that each include the design, fabrication, testing, documentation, delivery, and installation of 15kV Class Arc Terminating Outdoor Metal Clad Switchgear and associated walk-in enclosures in the United States, within the last five (5) years ending September 30, 2024.

1411829647 (RFP) 15kV Substation Switchgear Projects - Appendix B - Bid Forms

Each project reference should include the following:

Project Reference 1

Company Name: NIPSCO
Company Contact Name: Tim Haan
Company Contact Phone Number: 219-290-7840
Company Contact E-Mail Address: THaane@nsource.com
Project Completion Date: multiple / ongoing
Where was this project installed? Indiana

Does this project include the design, fabrication, testing, documentation, delivery, and installation of 15kV Class Arc Terminating Outdoor Metal Clad Switchgear and associated walk-in Enclosure? Yes ☒ No ☐

Description of Project (include manufacturer name for switchgear, building and breakers used for project):

15kV, 2000A, Metal clad in climate controlled Building
Eaton VCP-W Breakers

Project Reference 2

Company Name: First Energy
Company Contact Name: Anthony Ricci
Company Contact Phone Number: 330-384-5010
Company Contact E-Mail Address: _____
Project Completion Date: multiple / ongoing
Where was this project installed? Ohio / Pennsylvania

Does this project include the design, fabrication, testing, documentation, delivery, and installation of 15kV Class Arc Terminating Outdoor Metal Clad Switchgear and associated walk-in Enclosure? Yes ☒ No ☐

Description of Project (include manufacturer name for switchgear, building and breakers used for project):

5 kV - 38 kV
Hybrid Metal Enclosed / control House

1411829647 (RFP) 15kV Substation Switchgear Projects - Appendix B - Bid Forms

Project Reference 3

Company Name: Alliant

Company Contact Name: David Herzog

Company Contact Phone Number: 608-458-3639

Company Contact E-Mail Address: David.Herzog@alliantenergy.com

Project Completion Date: multiple / ongoing

Where was this project installed? All over Wisconsin

Does this project include the design, fabrication, testing, documentation, delivery, and installation of 15kV Class Arc Terminating Outdoor Metal Clad Switchgear and associated walk-in Enclosure? Yes ☒ No ☐

Description of Project (include manufacturer name for switchgear, building and breakers used for project):

27kV, 2500 Amp, Metal Clad / Climate controlled House

1411829647 (RFP) 15kV Substation Switchgear Projects - Appendix B - Bid Forms

LIST OF SUBCONTRACTORS

JEA Solicitation Number _____ requires certain major Subcontractors be listed on this form, unless the work will be self-performed by the Company.

The undersigned understands that failure to submit the required Subcontractor information on this form will result in bid rejection, and the Company agrees to employ the Subcontractors specified below: (Use additional sheets as necessary)

Note: This list of Subcontractors shall not be modified subsequent to bid opening, without a showing of good cause and the written consent of JEA.

Type of Work	Corporate Name of Subcontractor	Subcontractor Primary Contact Person & Telephone Number	Subcontractor's License Number (if applicable)	Percentage of Work or Dollar Amount
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NO Contractors

Signed: _____

Company: _____

Address: _____

Date: _____

LIST OF JSEB SUBCONTRACTORS

1411829647 (RFP) 15kV Substation Switchgear Projects

1411829647 (RFP) 15kV Substation Switchgear Projects - Appendix B - Bid Forms

The following JSEB Subcontractors will be utilized in fulfilling the terms and conditions of a Project Authorization arising from award of JEA - _____. I (We) the undersigned understand that failure to submit said information will result in bid rejection. I (We) will employ the JSEB Subcontractors specified below: (Use additional sheets as necessary)

Class of Work (Category) Dollar Amount	Name of JSEB Contractor (Indicate below)	Percentage of Total Job or

N/A

Signed: _____

Company: _____

Address: _____

Date: _____

Note: This list shall not be modified subsequent to bid opening without a showing of good cause and the written consent of the JEA.



VENDOR CONFLICT OF INTEREST DISCLOSURE FORM INSTRUCTIONS

Vendors shall not try to gain an unfair competitive advantage or influence the ability of JEA officers and employees to make impartial and objective decisions on behalf of JEA.

All vendors interested in conducting business with JEA must complete and return the Vendor Conflict of Interest Disclosure Form found on the following page in order to be eligible to be awarded a contract with JEA. Please note that all vendors are subject to comply with JEA's conflict of interest policies provided below.

1. No JEA officer (e.g., JEA Board member and elected City official) or employee has an ownership interest of more than 5% in vendor's company.
2. No JEA officer or employee is an officer, director, partner or proprietor of vendor's company.
3. No JEA officer or employee is employed by or being considered for employment by vendor's company.
4. No JEA officer or employee work as a consultant or has a contractual relationship with vendor's company.
5. No JEA officer or employee will derive a personal financial gain or loss from this contract.
6. No relative of a JEA officer or employee will derive a personal financial gain or loss from this contract. (Relatives include a father, mother, son, daughter, husband, wife, brother, sister, father-in-law, mother-in-law, son-in-law, or daughter-in-law.)

If a vendor has one or more relationships with a JEA officer or employee or a relative of a JEA officer or employee that meets the criteria described above, then the vendor shall disclose the information by completing the Conflict of Interest Form on the following page.



CONFLICT OF INTEREST DISCLOSURE FORM

1411829647 (RFP) 15kV Substation Switchgear Projects - Appendix B - Bid Forms

*Disclosing a potential conflict of interest does not disqualify vendors. In the event vendors do not disclose potential conflicts of interest, and they are detected by JEA, vendor may be **disqualified** from doing business with JEA.*

Questions about this form? Contact (JEA, Buyer)

JEA Bid/Solicitation/Contract Number:	Name of JEA Employee(s) Working on Vendor's Current Contract(s) with JEA:	
Vendor Name:		Vendor Phone:
Vendor's Authorized Representative Name and Title:		Authorized Representative's Phone:
NAME(S) OF JEA EMPLOYEE(S) / PUBLIC OFFICER(S) WITH POTENTIAL CONFLICT OF INTEREST		
Name of JEA public officer(s), employee(s), or relatives with whom there may be a potential conflict of interest. If more than five, attach a second form.		Relationship of JEA public officer(s)/employee(s) and/or relative(s) to vendor's company from list above (e.g. 1(a), 2, etc.). Please list all that apply:
1.		
2.		
3.		
4.		
5.		
<input type="checkbox"/> Vendor has no conflict of interest to report.		
<input type="checkbox"/> Vendor hereby declares it has not and will not provide gifts or hospitality of any dollar value or any other gratuities to any JEA officer or employee to obtain or maintain a contract.		
<input type="checkbox"/> I certify that this Conflict of Interest Disclosure has been examined by me and that its contents are true and correct to my knowledge and belief and I have the authority to so certify on behalf of the Vendor.		
Vendor's Authorized Representative Signature:		Date:
<hr/>		

FOR JEA USE ONLY IF CONFLICT NOTED

This form has been reviewed by:

Name of JEA Ethics Officer:	Signature:	Date:

1411829647 (RFP) 15kV Substation Switchgear Projects - Appendix B - Bid Forms

Note:



JEA

Quote No: 1124-29

Rev.

Date: 11/15/24

Ref: Kennedy Substation

Quoted By	FOB	Shipping Terms	Lead Time	Payment terms
David Diem	See Attachment A	See Attachment A	See Attachment A	See Attachment A

Line Item	Qty	Description	Unit Price	Line Total
1	1	15kV, 3000 amp, Metal Clad Switchgear and Power Distribution Center, NEMA 3R Outdoor Construction Per The Description and BOM Listed Below.	\$1,439,960.00	\$1,439,960.00
2		Freight, 4215 Talleyrand Avenue, Jacksonville FL	\$44,615.00	\$44,615.00
3		Field Supervision / Testing	\$19,000.00	\$19,000.00
4		Training (Includes 1 8-hr day)	\$9,900.00	\$9,900.00
5		5-Year Extended Warranty	\$28,800.00	\$28,800.00

Item #1

System Parameters:

Maximum Voltage: 15kV
Nominal Voltage: 13.2kV
Short Circuit Rating: 25kA
Phase sequence: ABC (left to right when standing in front of switchgear)
BIL: 95kV

Bus Specifications:

Main Bus Insulation: Fluidized Bed Epoxy
Main Bus Rating: 3000 amp
Main Bus Material: Two Layer 3/8" x 6" Rounded Edge Copper
Main Bus Plating: Silver
Ground Bus: .25" X 2"
Ground Bus Plating: Silver

Bus Supports:

Inner Unit Bus Supports: Glass Polyester
Insulator Material: Bisphenol-A /Cycloaliphatic

Structure Specifications:

Enclosure Type: Indoor
Enclosure Material: 11 gauge galvalume steel, 12 gauge 304L stainless steel
Front Door Latching: Lift and Turn Pad-lockable with 3-point latching
Interior Paint Color: ANSI-61 Grey
Exterior Paint Color: ANSI-61 Grey
Paint Standard: C57.12.28
Rear Door Access: Doors
Floor Plate: Yes, cutouts shall be 24" x 12"

Breaker Specifications:

MOC: Yes
TOC: Yes

Control Power Specifications:

Breaker Control Power Source: SPS Supplied 125VDC UPS

Wiring Specifications:

Control Wire Gauge: Standard #14 SIS
Control Wire Color: Gray
CT Wire Gauge: Standard #12 SIS
PT Wire Gauge: Standard #12 SIS
CT Wire Color: Gray
Wire Label Type: Adhesive Wrap Around
Terminal Type: Insulated Ring
Wire Label Text: Number Only

Additional Requirements:



NRTL Label: Yes, CSA-US
Future Expansion: No
Name Plates
33" Termination Height

Shipping Info:

Number of Sections: 10
Approximate Dimensions: 360"W x 96"D x 95"H

One Main Breaker Section (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

- 1 – Vacuum breaker, 15kV, 3000 amp, 25kA, 3-cycle, Powell
- 6 – Current transformers, line side, 2000:5 ratio, C200, Amran
- 6 – Current transformers, load side, 2000:5 ratio, C200, Amran
- 1 – Breaker control switch, GE SB-10
- 1 – Multifunction relay, Schweitzer SEL-751501ACACA70850620
- 1 – Indicating light, red, GE ET-16
- 1 – Indicating light, green, GE ET-16
- 1 – Indicating light, white, GE ET-16
- 1 – Meter, Schneider Ion 7650
- 1 – Meter, Shark 100
- 1 – Lock out relay, type 24, Electroschalt
- 1 – Indicating light, GE ET-16, Clear
- 1 – Multifunction relay, Schweitzer SEL-07871X1ACACAA5850220
- 1 – Tap position monitor, INCON 1250B
- 1 – Digital tap position monitor, Beckwith M-2001C
- 1 – Lot test switches
- 1 – Lot thermostatically controlled strip heaters
- 1 – Lot silver-plated copper bus bar

One Feeder Breaker Section (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

- 1 – Vacuum breaker, 15kV, 1200 amp, 25kA, 3-cycle, Powell
- 3 – Current transformers, line side, 1200:5 ratio, C200, Amran
- 3 – Current transformers, load side, 2000:5 ratio, C200, Amran
- 1 – Potential transformer drawer, 15kV, drawout, Eaton or equal
- 3 – Potential transformers, 8400-120Vac, ABB VIZ-11 or equal
- 1 – Breaker control switch, GE SB-10
- 1 – Multifunction relay, Schweitzer SEL-751501ACACA70850620
- 1 – Indicating light, red, GE ET-16
- 1 – Indicating light, green, GE ET-16
- 1 – Indicating light, white, GE ET-16
- 1 – Meter, Shark 100
- 1 – Indicating light, GE ET-16, Clear
- 1 – Lot test switches
- 1 – Lot thermostatically controlled strip heaters
- 1 – Lot silver-plated copper bus bar

Seven Feeder Breaker Sections (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

- 1 – Vacuum breaker, 15kV, 1200 amp, 25kA, 3-cycle, Powell
- 3 – Current transformers, line side, 1200:5 ratio, C200, Amran
- 3 – Current transformers, load side, 2000:5 ratio, C200, Amran



- 1 – Breaker control switch, GE SB-10
- 1 – Multifunction relay, Schweitzer SEL-751501ACACA70850620
- 1 – Indicating light, red, GE ET-16
- 1 – Indicating light, green, GE ET-16
- 1 – Indicating light, white, GE ET-16
- 1 – Meter, Shark 100
- 1 – Indicating light, GE ET-16, Clear
- 1 – Lot test switches
- 1 – Lot thermostatically controlled strip heaters
- 1 – Lot silver-plated copper bus bar

One Tie Breaker Section (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

- 1 – Vacuum breaker, 15kV, 3000 amp, 25kA, 3-cycle, Powell
- 6 – Current transformers, line side, 2000:5 ratio, C200, Amran
- 6 – Current transformers, load side, 2000:5 ratio, C200, Amran
- 1 – Satellite clock, Schweitzer SEL-2407
- 1 – Real Time Automation Controller, Schweizer SEL-3350#IKP4
- 1 – Breaker control switch, GE SB-10
- 1 – Multifunction relay, Schweitzer SEL-751501ACACA70850620
- 1 – Indicating light, red, GE ET-16
- 1 – Indicating light, green, GE ET-16
- 1 – Indicating light, white, GE ET-16
- 1 – Lot test switches
- 1 – Lot thermostatically controlled strip heaters
- 1 – Lot silver-plated copper bus bar

Misc. Equipment

- 6 – SEL-2814M0
- 12 – SEL-2812MRX0
- 12 – SEL-2812MTX0
- 12 – SEL-C808
- 1 – Arc Quench Device SiQuench AQD, 3AM4132-1DA12-0AB2-Z
- 1 – Arc Quench Protective Device, AQ-110PLV-AABA
- 1 – Arc Flash Sensor Relay, AQ-103LV
- 14 – Arc Flash Point Light Sensor, AQ-01C-XXX
- 1 – Arc Quencher Assertion Fiber Cable, AX-001-3
- 1 – Safety + Annunciator Panel w/ Siren
- 1 – Power meter and SOE Recorder, Nexus 1500+
- 1 – AQ System C80 Controller with Ethernet Communications
- 1 – AQ System 10" Color Touchscreen HMI
- 1 – RJ-45 External Port Phoenix Quint Power Supply

Accessories:

- 2 – Charging handles, Powell
- 2 – Racking cranks, Powell
- 1 – Breaker test cabinet, Powell
- 1 – Test jumper, Powell
- 1 – Remote racking device, Powell
- 10 – Remote racking device door bracket, Powell

Power Distribution Center**General Construction:**

PDC will be weatherproof outdoor weather tight construction design with self-supporting / self-framing interlocking panels. Base frame to be fabricated from structural steel channel, wide flange beams and angles forming a self-supporting grid to support the floor or brace for shipment as required.

Nominal Dimensions:

Length: 36' – 0"

Width: 15' – 0"

Ceiling Height: 10' – 0"

Aisle Depth: 6' – 0"

Design:

Classification: General Purpose Non-Hazardous

Roof load: 30 psf International Building Code (latest revision)

Wind load: International Building Code (latest revision)

Floor loading: 250 psf DL + LL

Base deflection L/240

Roof panels: 12 gauge ASTM A653 Minimum

Exterior wall panels: 16 gauge ASTM A653 Minimum

Interior wall panels: 16 gauge ASTM A653

Ceiling panels: 14 gauge ASTM A653

Floor plate: .250" – Mild Steel

Base Frame: ASTM A572 (C10 & Larger) ASTM A36 (C8 & smaller)

Base Frame Coating: Bitumastic

Certified design calculations performed by a professional engineer registered in the state of Florida.

Welding to be in accordance with the latest revision of AWS D1.1 structural welding code.

Paint finish: Acrylic Urethane over rust inhibiting Epoxy Primer to dry build of 3-4 mils. Paint finish meets or exceeds ANSI C57.12.28, Paint Specifications for Pad Mounted Equipment.

Exterior finish color: ANSI #70 Light Gray

Interior finish color: Gloss White

Floor finish color: ANSI #61 Gray with anti-skid

Insulation:

Roof insulation: R-30 Foil Faced Polyisocyanurate Foam Sheathing

Wall insulation: R-19 Foil Faced Polyisocyanurate Foam Sheathing

Floor insulation: R-13 Closed-cell spray applied polyurethane foam

Doors:

2 – Personnel Doors, Single Wide LHRB Door

- 2 - 3'-6" X 8'-0" X 3-1/2" 14ga Galvanneal Single Door Frame
- 2 - 3'-6" X 8'-0" X 1-3/4" 14ga Galvanneal, R9 Insulated Door
- 8 - 4-1/2" X 4-1/2" Standard Weight Hinges
- 2 – Door Closer
- 2 – Crash Chain
- 2 – Panic Push Bar Device
- 2 – Rim Cylinder, with disposable temporary core
- 2 – Lot - Gasket, D-Shaped Bulb Seal, EPDM Sponge Rubber

- 2 – Door limit switches DTE6-2RN2

*Personnel and equipment doors will be provided with temporary construction cores only.

10 – Medium voltage rear access equipment doors

- 14 gauge, Galvanneal
- Pad-lockable door handles
- 3 point latching
- Grade 5 zinc plated hardware
- Door insulation: Foil lined foam board to R-6.5

12 – Danger High Voltage / Keep Out warning sign (or customer specified)

HVAC Equipment:

1 – Bard Manufacturing Company 4 ton HVAC unit or equal Wall mount with 10kW heat (To Be Verified After Receipt of PO)

- 240Vac, 1-phase, 60hz
- Low pressure switch
- High pressure switch
- Low ambient control
- Compressor anti-cycle relay
- Pleated return filter
- R410A refrigerant
- 20 Gauge Galvanized Cabinet

1 – Bard Thermostats

- Automatic or Manual Changeover
- Backlit display
- 5 minute compressor protection
- Separate heating and cooling set points
- Smart recovery (heating mode)
- Non- Programmable

Electrical Utilities:

1 – Interior conduit- exposed EMT conduit with set screw fittings as required by NEC

1 – Power wiring: #12 AWG Type THHN / THWN

1 – Control wiring: #12 AWG Type SIS

1 – HVAC controls: #18 AWG thermostat cable

8 - LED Light Fixtures

- Initial Delivered Lumens @ 25°C Ambient – 3,700
- Input Power - 39W
- E-conolight, E-LWT03

2 – Exterior Light Fixtures - LED

- 1450 - 6850 Lumens (adjustable)
- 120Vac
- Built-In Photocell switch
- Lithonia TWX2-LED-ALO-50K-MVOLT-PE-DDBTXD

2 – Emergency / EXIT lights

- Two 1.8W LED lamps for emergency light
- Test switch
- Status indicator
- Nickel-cadmium backup battery, rechargeable

- Lithonia ECRGC-RD-M6
- 2 – 3/Way Switches, 120 Vac, 20amp
- 2 – Interior duplex receptacles, 120 Vac,
- 2 – Exterior duplex receptacles, 120 Vac, GFCI, 20 amp
- 2 – Weatherproof mounting box

Distribution Panels:

- 1 – AC panel board
 - 1-phase, 3wire
 - 120/240 V, 100 amp
 - 18 circuit, 10kAIC
 - Lot breakers as required for utility circuits
 - NEMA1 box
 - NEMA1 cover
 - Square D NQOD
- 1 – Lot of 80 Linear Feet (approximate)
 - Ladder Type, Aluminum
 - 24" Wide Cable Tray
 - 7 ¼" Side Rail Height
 - 6" Load Depth
 - 9" Rung Spacing
 - Tray supported every 72" and at splices
 - Strut supports anchored to ceiling
 - All-thread hanger rods
 - Trapeze strut supports

Grounding:

- 4 – Ground pads, 4-hole stainless steel welded to base frame
- 1 – Lot ground drops from ground loop to ground pads as required

Fire Protection:

- 2 – Smoke / Heat detectors
 - Gentex 9120
 - Photoelectric type
 - 120Vac with battery back-up
 - Supplied with contacts for remote monitoring.
- 1 - Fire Extinguisher
 - Extinguisher Type - Dry Chemical
 - UL Rating - 5B:C
 - Capacity - 11 lb.
 - Extinguish Agent Type - Carbon Dioxide
 - Standards - OSHA Hazard Communication
 - Grainger 4XP83

Accessories:

- 1 – Set of removable lifting lugs with hardware (shipped loose)
- 1 – Lot floor & wall cutouts as required for cables, conduits and cable trays.
- 1 – Lot removable aluminum cover plates for floor cutouts.

1 – Fiber Optic Rack, Chatsworth 55053-103

The Following Items Shipped Loose For Field Installation By Others:

- Lifting lugs
- HVAC unit
- Exterior lighting

Stairs and Landings: Not included

Deviations To 15kV Specifications:

- 3.6 – SPS is not ISO-9001 certified however is ISO-9001 compliant.
- 3.8 – SPS is providing CSA-US labeled gear
- 6.3 – SPS is providing Arc mitigation in lieu of Arc Resistant switchgear
- 7.11 – SPS is providing terminations for bottom exit however SPS can provide top exit if required for an additional fee.
- 17.4.6 – SPS is not providing a lifter as all breakers are roll on the floor style.
- 22.2 – SPS to provide drawings and equipment timelines as listed on Attachment A
- 29 – SPS is providing a 5 year warranty as a separate line item, however it is base on time of shipment in lieu of startup

Deviations To Appendix - Metal Clad Switchgear Building

- 1.1 – SPS is providing a building that meets environmental requirements however the building does not meet IECC or ANSI/ASHRAE 90.1.
- 1.6 – SPS is not ISO-9001 certified however is ISO-9001 compliant
- 1.7 – SPS is providing CSA-US labeled gear
- 1.10 – SPS warranty is 5 years after shipment
- 2.1.7 – SPS is not providing a fire alarm panel. Heat detectors are included in the price
- 2.3.2.3 – SPS is providing HVACs that are capable of shutdown however SPS is not providing a fire panel
- 2.11.1 – SPS is providing ANSI 70 gray exterior paint
- 2.11.2 – SPS is providing its standard white paint
- 3.3 – Risk classification III
- 3.4 – Wind importance factor 1.0
- 4.1 – Installation by others
- 6.2 – SPS is providing a 5 year warranty as a separate line item, however it is base on time of shipment in lieu of startup

Clarifications:

- All incoming / outgoing wire, and terminations by others.
- Relay settings coordination & programming by others.
- **Quoted price is for above equipment descriptions & BOM's only, if additional or different components are required the price is subject to change.**
- PDC standard design generally does not meet IECC or ANSI/ASHRAE 90.1, Please contact factory for an updated price if required.
- Personnel and equipment doors will be provided with construction cores only.
- Foundation design by others.
- Seismic mounting and anchoring locations shall be verified by calculations.
- Dimensions & weights shown are approximate only and are not for construction purposes.
- Standard SPS factory production testing is included in the quoted price.
- Field-testing & demonstration are not included in the quoted price but is available contact the factory for rates.
- Switchgear Power Systems standard warranty was quoted, 18 months from ship date or 12 months after energizing equipment (whichever comes first). If SPS is required to put the equipment into storage the warranty period is 18 months starting the date the equipment goes into storage.
- Standard SPS terms and conditions apply.
- Quote price expires in 30 days

Material shortage clause

"The Parties are aware of the shortage of raw materials, electronic components worldwide which is likely to last for the foreseeable future, as well as of market fluctuations in the availability and cost of other raw materials, commodities, other critical components and transportation capacities. Notwithstanding anything to the contrary in the contract/terms and conditions/purchase order, if after the date of SPS's proposal / offer or during the term of the performance of the contract/purchase order there are any changes to availability and / or market conditions for electronic components, raw materials, commodities and transportation capabilities directly or indirectly affecting SPS's performance, SPS shall be entitled to relief in the schedule of the performance or delivery of the directly or indirectly affected scope of work under the contract/purchase order. In such circumstances, the Parties shall meet without delay and discuss in good faith to find a mutually agreeable solution, with equitable adjustment to the contract/purchase order date of delivery or completion. Customer hereby acknowledges and agrees that in said circumstances SPS may not be able to comply with the originally agreed delivery or completion schedule and that SPS shall not be liable for any liquidated or actual damages in connection thereto."

Price Escalation

Due to the uncertainty of raw material price increases, SPS will adopt the following formula in calculating Price Escalation Change Order. Price Escalation Change Order = $((\text{PPI at time of SPS Release for Manufacturing} / \text{PPI at time of SPS Quote}) - 1) \times (\text{SPS Accepted Customer PO Price} \times \text{Material Category \%})$. PPI = Bureau of Labor Statistics Producer Price Indexes (PPI) for categories identified below. Price Escalations shall only apply if the Price Escalation Change Order increase is greater than 3%.

1. Sheet Metal PPI Index WPU1017
 - a. 23% of the base price shall be subject to escalation based on increases to this category.
2. Copper PPI Index WPUSI019011
 - a. 7% of the base price shall be subject to escalations based on increases to this category.
3. Circuit Breakers WPU11710143
 - a. 1.5% of the base price shall be subject to escalations based on increases to this category.
4. Relays PCU335314335314
 - a. 2% of the base price shall be subject to escalations based on increases to this category.

ATTACHMENT A

1. Freight terms: Prepaid & Add
2. FOB: Factory
3. Offloading & placement: by others.
4. Any site modifications required to off load or deliver the equipment shall be the responsibility of others.
5. If a steerable trailer is required to ship the equipment additional charges may be applied.
6. Circuit breakers are shipped loose. Installation into PDC and/ or switchgear by others.
7. Uncrating of breakers by others.
8. Export packing by others.
9. Estimated Shipment lead time: 9/2026
10. Estimated Approval Drawing Lead time: 14-16 weeks after receipt of order.
11. Lead times are based on current factory loading at time of quote & current component availability, lead times are subject to change based on current factory loading & current component lead times at receipt of order **and/or at drawing and BOM approval.**
12. Payment terms: Net 30 days

Order Cancellation Fee Schedule:

- 5% fee after receipt of order prior to commencing with approval drawings
- 20% fee after commencing with approval drawings but not submitted.
- 40% fee after release of approval drawings but prior to commencing with production
- 80% fee after commencing with production prior to final test
- 100% fee after commencing with final assembly



JEA

Quote No: 1124-27
 Rev.
 Date: 11/18/24
 Ref: Georgia Substation

Quoted By	FOB	Shipping Terms	Lead Time	Payment terms
David Diem	See Attachment A	See Attachment A	See Attachment A	See Attachment A

Line Item	Qty	Description	Unit Price	Line Total
1	1	15kV, 3000 amp, Metal Clad Switchgear and Power Distribution Center, NEMA 3R Outdoor Construction Per The Description and BOM Listed Below. West Switchgear	\$1,142,980.00	\$1,142,980.00
2	1	15kV, 3000 amp, Metal Clad Switchgear and Power Distribution Center, NEMA 3R Outdoor Construction Per The Description and BOM Listed Below. T3 Switchgear	\$1,518,620.00	\$1,518,620.00
3	1	15kV, 3000 amp, Metal Clad Switchgear and Power Distribution Center, NEMA 3R Outdoor Construction Per The Description and BOM Listed Below. T1 Switchgear	\$1,270,625.00	\$1,270,625.00
4	3	Freight, 664 Franklin Street, Jacksonville FL	\$44,615.00	\$133,845.00
5	3	Field Supervision / Testing Per Trip	\$19,000.00	\$57,000.00
6	3	Training (Includes 1 8-hr day) Per Trip	\$9,900.00	\$29,700.00
7	1	5-Year Extended Warranty Line Item 1	\$22,860.00	\$22,860.00
8	1	5-Year Extended Warranty Line Item 2	\$30,375.00	\$30,375.00
9	1	5-Year Extended Warranty Line Item 3	\$25,415.00	\$25,415.00

Item #1

System Parameters:

Maximum Voltage: 15kV

Nominal Voltage: 13.2kV

Short Circuit Rating: 25kA

Phase sequence: ABC (left to right when standing in front of switchgear)

BIL: 95kV

Bus Specifications:

Main Bus Insulation: Fluidized Bed Epoxy

Main Bus Rating: 3000 amp

Main Bus Material: Two Layer 3/8" x 6" Rounded Edge Copper

Main Bus Plating: Silver

Ground Bus: .25" X 2"

Ground Bus Plating: Silver

Bus Supports:

Inner Unit Bus Supports: Glass Polyester

Insulator Material: Bisphenol-A /Cycloaliphatic

Structure Specifications:

Enclosure Type: Indoor

Enclosure Material: 11 gauge galvalume steel, 12 gauge 304L stainless steel

Front Door Latching: Lift and Turn Pad-lockable with 3-point latching

Interior Paint Color: ANSI-61 Grey

Exterior Paint Color: ANSI-61 Grey

Paint Standard: C57.12.28

Rear Door Access: Doors

Floor Plate: Yes, cutouts shall be 24" x 12"

Breaker Specifications:

MOC: Yes

TOC: Yes

Control Power Specifications:

Breaker Control Power Source: SPS Supplied 125VDC UPS

Wiring Specifications:

Control Wire Gauge: Standard #14 SIS

Control Wire Color: Gray

CT Wire Gauge: Standard #12 SIS

PT Wire Gauge: Standard #12 SIS

CT Wire Color: Gray

Wire Label Type: Adhesive Wrap Around

Terminal Type: Insulated Ring
Wire Label Text: Number Only

Additional Requirements:

NRTL Label: Yes, CSA-US
Future Expansion: No
Name Plates
33" Termination Height

Shipping Info:

Number of Sections: 7
Approximate Dimensions: 252"W x 96"D x 95"H

Two Tie Breaker Sections (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

- 1 – Vacuum breaker, 15kV, 3000 amp, 25kA, 3-cycle, Powell
- 6 – Current transformers, line side, 3000:5 ratio, C200, Amran
- 6 – Current transformers, load side, 3000:5 ratio, C200, Amran
- 1 – Satellite clock, Schweitzer SEL-2407
- 1 – Real Time Automation Controller, Schweizer SEL-3350#IKP4
- 1 – Breaker control switch, GE SB-10
- 1 – Multifunction relay, Schweitzer SEL-751501ACACA70850620
- 1 – Indicating light, red, GE ET-16
- 1 – Indicating light, green, GE ET-16
- 1 – Indicating light, white, GE ET-16
- 1 – Lot test switches
- 1 – Lot thermostatically controlled strip heaters
- 1 – Lot silver-plated copper bus bar

Five Feeder Breaker Sections (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

- 1 – Vacuum breaker, 15kV, 1200 amp, 25kA, 3-cycle, Powell
- 3 – Current transformers, line side, 1200:5 ratio, C200, Amran
- 3 – Current transformers, load side, 3000:5 ratio, C200, Amran
- 1 – Breaker control switch, GE SB-10
- 1 – Multifunction relay, Schweitzer SEL-751501ACACA70850620
- 1 – Indicating light, red, GE ET-16
- 1 – Indicating light, green, GE ET-16
- 1 – Indicating light, white, GE ET-16
- 1 – Meter, Shark 100
- 1 – Indicating light, GE ET-16, Clear
- 1 – Lot test switches
- 1 – Lot thermostatically controlled strip heaters
- 1 – Lot silver-plated copper bus bar

Misc. Equipment

- 6 – SEL-2814M0
- 12 – SEL-2812MRX0
- 12 – SEL-2812MTX0
- 12 – SEL-C808
- 1 – Arc Quench Device SiQuench AQD, 3AM4132-1DA12-0AB2-Z
- 1 – Arc Quench Protective Device, AQ-110PLV-AABA

- 1 – Arc Flash Sensor Relay, AQ-103LV
- 14 – Arc Flash Point Light Sensor, AQ-01C-XXX
- 1 – Arc Quencher Assertion Fiber Cable, AX-001-3
- 1 – Safety + Annunciator Panel w/ Siren
- 1 – Power meter and SOE Recorder, Nexus 1500+
- 1 – AQ System C80 Controller with Ethernet Communications
- 1 – AQ System 10" Color Touchscreen HMI
- 1 – RJ-45 External Port Phoenix Quint Power Supply

Accessories:

- 2 – Charging handles, Powell
- 2 – Racking cranks, Powell
- 1 – Breaker test cabinet, Powell
- 1 – Test jumper, Powell
- 1 – Remote racking device, Powell
- 10 – Remote racking device door bracket, Powell

Power Distribution Center**General Construction:**

PDC will be weatherproof outdoor weather tight construction design with self-supporting / self-framing interlocking panels. Base frame to be fabricated from structural steel channel, wide flange beams and angles forming a self-supporting grid to support the floor or brace for shipment as required.

Nominal Dimensions:

- Length: 28' – 0"
- Width: 15' – 0"
- Ceiling Height: 10' – 0"
- Aisle Depth: 6' – 0"

Design:

- Classification: General Purpose Non-Hazardous
- Roof load: 30 psf International Building Code (latest revision)
- Wind load: International Building Code (latest revision)
- Floor loading: 250 psf DL + LL
- Base deflection L/240
- Roof panels: 12 gauge ASTM A653 Minimum
- Exterior wall panels: 16 gauge ASTM A653 Minimum
- Interior wall panels: 16 gauge ASTM A653
- Ceiling panels: 14 gauge ASTM A653
- Floor plate: .250" – Mild Steel
- Base Frame: ASTM A572 (C10 & Larger) ASTM A36 (C8 & smaller)
- Base Frame Coating: Bitumastic
- Certified design calculations performed by a professional engineer registered in the state of Florida.
- Welding to be in accordance with the latest revision of AWS D1.1 structural welding code.
- Paint finish: Acrylic Urethane over rust inhibiting Epoxy Primer to dry build of 3-4 mils. Paint finish meets or exceeds ANSI C57.12.28, Paint Specifications for Pad Mounted Equipment.
- Exterior finish color: ANSI #70 Light Gray

Interior finish color: Gloss White

Floor finish color: ANSI #61 Gray with anti-skid

Insulation:

Roof insulation: R-30 Foil Faced Polyisocyanurate Foam Sheathing

Wall insulation: R-19 Foil Faced Polyisocyanurate Foam Sheathing

Floor insulation: R-13 Closed-cell spray applied polyurethane foam

Doors:

2 – Personnel Doors, Single Wide LHRB Door

- 2 - 3'-6" X 8'-0" X 3-1/2" 14ga Galvanneal Single Door Frame
- 2 - 3'-6" X 8'-0" X 1-3/4" 14ga Galvanneal, R9 Insulated Door
- 8 - 4-1/2" X 4-1/2" Standard Weight Hinges
- 2 – Door Closer
- 2 – Crash Chain
- 2 – Panic Push Bar Device
- 2 – Rim Cylinder, with disposable temporary core
- 2 – Lot - Gasket, D-Shaped Bulb Seal, EPDM Sponge Rubber
- 2 – Door limit switches DTE6-2RN2

*Personnel and equipment doors will be provided with temporary construction cores only.

7 – Medium voltage rear access equipment doors

- 14 gauge, Galvanneal
- Pad-lockable door handles
- 3 point latching
- Grade 5 zinc plated hardware
- Door insulation: Foil lined foam board to R-6.5

9 – Danger High Voltage / Keep Out warning sign (or customer specified)

HVAC Equipment:

1 – Bard Manufacturing Company 4 ton HVAC unit or equal Wall mount with 10kW heat (To Be Verified After Receipt of PO)

- 240Vac, 1-phase, 60hz
- Low pressure switch
- High pressure switch
- Low ambient control
- Compressor anti-cycle relay
- Pleated return filter
- R410A refrigerant
- 20 Gauge Galvanized Cabinet

1 – Bard Thermostats

- Automatic or Manual Changeover
- Backlit display
- 5 minute compressor protection
- Separate heating and cooling set points
- Smart recovery (heating mode)
- Non- Programmable

Electrical Utilities:

- 1 – Interior conduit- exposed EMT conduit with set screw fittings as required by NEC
- 1 – Power wiring: #12 AWG Type THHN / THWN
- 1 – Control wiring: #12 AWG Type SIS
- 1 – HVAC controls: #18 AWG thermostat cable
- 6 - LED Light Fixtures
 - Initial Delivered Lumens @ 25°C Ambient – 3,700
 - Input Power - 39W
 - E-conolight, E-LWT03
- 2 – Exterior Light Fixtures - LED
 - 1450 - 6850 Lumens (adjustable)
 - 120Vac
 - Built-In Photocell switch
 - Lithonia TWX2-LED-ALO-50K-MVOLT-PE-DDBTXD
- 2 – Emergency / EXIT lights
 - Two 1.8W LED lamps for emergency light
 - Test switch
 - Status indicator
 - Nickel-cadmium backup battery, rechargeable
 - Lithonia ECRGC-RD-M6
- 2 – 3/4 Way Switches, 120 Vac, 20amp
- 2 – Interior duplex receptacles, 120 Vac,
- 2 – Exterior duplex receptacles, 120 Vac, GFCI, 20 amp
- 2 – Weatherproof mounting box

Distribution Panels:

- 1 – AC panel board
 - 1-phase, 3wire
 - 120/240 V, 100 amp
 - 18 circuit, 10kAIC
 - Lot breakers as required for utility circuits
 - NEMA1 box
 - NEMA1 cover
 - Square D NQOD
- 1 – Lot of 60 Linear Feet (approximate)
 - Ladder Type, Aluminum
 - 24" Wide Cable Tray
 - 7 ¼" Side Rail Height
 - 6" Load Depth
 - 9" Rung Spacing
 - Tray supported every 72" and at splices
 - Strut supports anchored to ceiling
 - All-thread hanger rods
 - Trapeze strut supports

Grounding:

- 4 – Ground pads, 4-hole stainless steel welded to base frame
- 1 – Lot ground drops from ground loop to ground pads as required

Fire Protection:

2 – Smoke / Heat detectors

- Gentex 9120
- Photoelectric type
- 120Vac with battery back-up
- Supplied with contacts for remote monitoring.

1 - Fire Extinguisher

- Extinguisher Type - Dry Chemical
- UL Rating - 5B:C
- Capacity - 11 lb.
- Extinguish Agent Type - Carbon Dioxide
- Standards - OSHA Hazard Communication
- Grainger 4XP83

Accessories:

1 – Set of removable lifting lugs with hardware (shipped loose)

1 – Lot floor & wall cutouts as required for cables, conduits and cable trays.

1 – Lot removable aluminum cover plates for floor cutouts.

1 – Fiber Optic Rack, Chatsworth 55053-103

The Following Items Shipped Loose For Field Installation By Others:

- Lifting lugs
- HVAC unit
- Exterior lighting

Stairs and Landings: Not included

Item #2

System Parameters:

Maximum Voltage: 15kV

Nominal Voltage: 13.2kV

Short Circuit Rating: 25kA

Phase sequence: ABC (left to right when standing in front of switchgear)

BIL: 95kV

Bus Specifications:

Main Bus Insulation: Fluidized Bed Epoxy

Main Bus Rating: 3000 amp

Main Bus Material: Two Layer 3/8" x 6" Rounded Edge Copper

Main Bus Plating: Silver

Ground Bus: .25" X 2"

Ground Bus Plating: Silver

Bus Supports:

Inner Unit Bus Supports: Glass Polyester

Insulator Material: Bisphenol-A /Cycloaliphatic

Structure Specifications:

Enclosure Type: Indoor

Enclosure Material: 11 gauge galvalume steel, 12 gauge 304L stainless steel

Front Door Latching: Lift and Turn Pad-lockable with 3-point latching

Interior Paint Color: ANSI-61 Grey

Exterior Paint Color: ANSI-61 Grey

Paint Standard: C57.12.28

Rear Door Access: Doors

Floor Plate: Yes, cutouts shall be 24" x 12"

Breaker Specifications:

MOC: Yes

TOC: Yes

Control Power Specifications:

Breaker Control Power Source: SPS Supplied 125VDC UPS

Wiring Specifications:

Control Wire Gauge: Standard #14 SIS

Control Wire Color: Gray

CT Wire Gauge: Standard #12 SIS

PT Wire Gauge: Standard #12 SIS

CT Wire Color: Gray
Wire Label Type: Adhesive Wrap Around
Terminal Type: Insulated Ring
Wire Label Text: Number Only

Additional Requirements:

NRTL Label: Yes, CSA-US
Future Expansion: No
Name Plates
33" Termination Height

Shipping Info:

Number of Sections: 8
Approximate Dimensions: 288"W x 96"D x 95"H

Two Tie Breaker Sections (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

1 – Vacuum breaker, 15kV, 3000 amp, 25kA, 3-cycle, Powell
6 – Current transformers, line side, 3000:5 ratio, C200, Amran
6 – Current transformers, load side, 3000:5 ratio, C200, Amran
1 – Satellite clock, Schweitzer SEL-2407
1 – Real Time Automation Controller, Schweizer SEL-3350#IKP4
1 – Breaker control switch, GE SB-10
1 – Multifunction relay, Schweitzer SEL-751501ACACA70850620
1 – Indicating light, red, GE ET-16
1 – Indicating light, green, GE ET-16
1 – Indicating light, white, GE ET-16
1 – Lot test switches
1 – Lot thermostatically controlled strip heaters
1 – Lot silver-plated copper bus bar

Five Feeder Breaker Sections (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

1 – Vacuum breaker, 15kV, 1200 amp, 25kA, 3-cycle, Powell
3 – Current transformers, line side, 1200:5 ratio, C200, Amran
3 – Current transformers, load side, 3000:5 ratio, C200, Amran
1 – Breaker control switch, GE SB-10
1 – Multifunction relay, Schweitzer SEL-751501ACACA70850620
1 – Indicating light, red, GE ET-16
1 – Indicating light, green, GE ET-16
1 – Indicating light, white, GE ET-16
1 – Meter, Shark 100
1 – Indicating light, GE ET-16, Clear
1 – Lot test switches
1 – Lot thermostatically controlled strip heaters
1 – Lot silver-plated copper bus bar

One Main Breaker Section (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

1 – Vacuum breaker, 15kV, 3000 amp, 25kA, 3-cycle, Powell
6 – Current transformers, line side, 3000:5 ratio, C200, Amran
6 – Current transformers, load side, 3000:5 ratio, C200, Amran
1 – Breaker control switch, GE SB-10

- 1 – Multifunction relay, Schweitzer SEL-751501ACACA70850620
- 1 – Indicating light, red, GE ET-16
- 1 – Indicating light, green, GE ET-16
- 1 – Indicating light, white, GE ET-16
- 1 – Meter, Schneider Ion 7650
- 1 – Meter, Shark 100
- 1 – Lock out relay, type 24, Electroswitch
- 1 – Indicating light, GE ET-16, Clear
- 1 – Multifunction relay, Schweitzer SEL-07871X1ACACAA5850220
- 1 – Tap position monitor, INCON 1250B
- 1 – Digital tap position monitor, Beckwith M-2001C
- 1 – Lot test switches
- 1 – Lot thermostatically controlled strip heaters
- 1 – Lot silver-plated copper bus bar

Misc. Equipment

- 6 – SEL-2814M0
- 12 – SEL-2812MRX0
- 12 – SEL-2812MTX0
- 12 – SEL-C808
- 1 – Arc Quench Device SiQuench AQD, 3AM4132-1DA12-0AB2-Z
- 1 – Arc Quench Protective Device, AQ-110PLV-AABA
- 1 – Arc Flash Sensor Relay, AQ-103LV
- 14 – Arc Flash Point Light Sensor, AQ-01C-XXX
- 1 – Arc Quencher Assertion Fiber Cable, AX-001-3
- 1 – Safety + Annunciator Panel w/ Siren
- 1 – Power meter and SOE Recorder, Nexus 1500+
- 1 – AQ System C80 Controller with Ethernet Communications
- 1 – AQ System 10" Color Touchscreen HMI
- 1 – RJ-45 External Port Phoenix Quint Power Supply

Accessories:

- 2 – Charging handles, Powell
- 2 – Racking cranks, Powell
- 1 – Breaker test cabinet, Powell
- 1 – Test jumper, Powell
- 1 – Remote racking device, Powell
- 10 – Remote racking device door bracket, Powell

Power Distribution Center**General Construction:**

PDC will be weatherproof outdoor weather tight construction design with self-supporting / self-framing interlocking panels. Base frame to be fabricated from structural steel channel, wide flange beams and angles forming a self-supporting grid to support the floor or brace for shipment as required.

Nominal Dimensions:

- Length: 30' – 0"
- Width: 15' – 0"
- Ceiling Height: 10' – 0"

Aisle Depth: 6' – 0"

Design:

Classification: General Purpose Non-Hazardous

Roof load: 30 psf International Building Code (latest revision)

Wind load: International Building Code (latest revision)

Floor loading: 250 psf DL + LL

Base deflection L/240

Roof panels: 12 gauge ASTM A653 Minimum

Exterior wall panels: 16 gauge ASTM A653 Minimum

Interior wall panels: 16 gauge ASTM A653

Ceiling panels: 14 gauge ASTM A653

Floor plate: .250" – Mild Steel

Base Frame: ASTM A572 (C10 & Larger) ASTM A36 (C8 & smaller)

Base Frame Coating: Bitumastic

Certified design calculations performed by a professional engineer registered in the state of Florida.

Welding to be in accordance with the latest revision of AWS D1.1 structural welding code.

Paint finish: Acrylic Urethane over rust inhibiting Epoxy Primer to dry build of 3-4 mils. Paint finish meets or exceeds ANSI C57.12.28, Paint Specifications for Pad Mounted Equipment.

Exterior finish color: ANSI #70 Light Gray

Interior finish color: Gloss White

Floor finish color: ANSI #61 Gray with anti-skid

Insulation:

Roof insulation: R-30 Foil Faced Polyisocyanurate Foam Sheathing

Wall insulation: R-19 Foil Faced Polyisocyanurate Foam Sheathing

Floor insulation: R-13 Closed-cell spray applied polyurethane foam

Doors:

2 – Personnel Doors, Single Wide LHRB Door

- 2 - 3'-6" X 8'-0" X 3-1/2" 14ga Galvanneal Single Door Frame
- 2 - 3'-6" X 8'-0" X 1-3/4" 14ga Galvanneal, R9 Insulated Door
- 8 - 4-1/2" X 4-1/2" Standard Weight Hinges
- 2 – Door Closer
- 2 – Crash Chain
- 2 – Panic Push Bar Device
- 2 – Rim Cylinder, with disposable temporary core
- 2 – Lot - Gasket, D-Shaped Bulb Seal, EPDM Sponge Rubber
- 2 – Door limit switches DTE6-2RN2

*Personnel and equipment doors will be provided with temporary construction cores only.

8 – Medium voltage rear access equipment doors

- 14 gauge, Galvanneal
- Pad-lockable door handles
- 3 point latching
- Grade 5 zinc plated hardware
- Door insulation: Foil lined foam board to R-6.5

10 – Danger High Voltage / Keep Out warning sign (or customer specified)

HVAC Equipment:

1 – Bard Manufacturing Company 4 ton HVAC unit or equal Wall mount with 10kW heat (To Be Verified After Receipt of PO)

- 240Vac, 1-phase, 60hz
- Low pressure switch
- High pressure switch
- Low ambient control
- Compressor anti-cycle relay
- Pleated return filter
- R410A refrigerant
- 20 Gauge Galvanized Cabinet

1 – Bard Thermostats

- Automatic or Manual Changeover
- Backlit display
- 5 minute compressor protection
- Separate heating and cooling set points
- Smart recovery (heating mode)
- Non- Programmable

Electrical Utilities:

1 – Interior conduit- exposed EMT conduit with set screw fittings as required by NEC

1 – Power wiring: #12 AWG Type THHN / THWN

1 – Control wiring: #12 AWG Type SIS

1 – HVAC controls: #18 AWG thermostat cable

7 - LED Light Fixtures

- Initial Delivered Lumens @ 25°C Ambient – 3,700
- Input Power - 39W
- E-conolight, E-LWT03

2 – Exterior Light Fixtures - LED

- 1450 - 6850 Lumens (adjustable)
- 120Vac
- Built-In Photocell switch
- Lithonia TWX2-LED-ALO-50K-MVOLT-PE-DDBTXD

2 – Emergency / EXIT lights

- Two 1.8W LED lamps for emergency light
- Test switch
- Status indicator
- Nickel-cadmium backup battery, rechargeable
- Lithonia ECRGC-RD-M6

2 – 3/Way Switches, 120 Vac, 20amp

2 – Interior duplex receptacles, 120 Vac,

2 – Exterior duplex receptacles, 120 Vac, GFCI, 20 amp

2 – Weatherproof mounting box

Distribution Panels:

1 – AC panel board

- 1-phase, 3wire
- 120/240 V, 100 amp
- 18 circuit, 10kAIC

- Lot breakers as required for utility circuits
 - NEMA1 box
 - NEMA1 cover
 - Square D NQOD
- 1 – Lot of 60 Linear Feet (approximate)
- Ladder Type, Aluminum
 - 24" Wide Cable Tray
 - 7 ¼" Side Rail Height
 - 6" Load Depth
 - 9" Rung Spacing
 - Tray supported every 72" and at splices
 - Strut supports anchored to ceiling
 - All-thread hanger rods
 - Trapeze strut supports

Grounding:

- 4 – Ground pads, 4-hole stainless steel welded to base frame
- 1 – Lot ground drops from ground loop to ground pads as required

Fire Protection:

- 2 – Smoke / Heat detectors
- Gentex 9120
 - Photoelectric type
 - 120Vac with battery back-up
 - Supplied with contacts for remote monitoring.
- 1 - Fire Extinguisher
- Extinguisher Type - Dry Chemical
 - UL Rating - 5B:C
 - Capacity - 11 lb.
 - Extinguish Agent Type - Carbon Dioxide
 - Standards - OSHA Hazard Communication
 - Grainger 4XP83

Accessories:

- 1 – Set of removable lifting lugs with hardware (shipped loose)
- 1 – Lot floor & wall cutouts as required for cables, conduits and cable trays.
- 1 – Lot removable aluminum cover plates for floor cutouts.
- 1 – Fiber Optic Rack, Chatsworth 55053-103

The Following Items Shipped Loose For Field Installation By Others:

- Lifting lugs
- HVAC unit
- Exterior lighting

Stairs and Landings: Not included

Item #3

System Parameters:

Maximum Voltage: 15kV

Nominal Voltage: 13.2kV

Short Circuit Rating: 25kA

Phase sequence: ABC (left to right when standing in front of switchgear)

BIL: 95kV

Bus Specifications:

Main Bus Insulation: Fluidized Bed Epoxy

Main Bus Rating: 3000 amp

Main Bus Material: Two Layer 3/8" x 6" Rounded Edge Copper

Main Bus Plating: Silver

Ground Bus: .25" X 2"

Ground Bus Plating: Silver

Bus Supports:

Inner Unit Bus Supports: Glass Polyester

Insulator Material: Bisphenol-A /Cycloaliphatic

Structure Specifications:

Enclosure Type: Indoor

Enclosure Material: 11 gauge galvalume steel, 12 gauge 304L stainless steel

Front Door Latching: Lift and Turn Pad-lockable with 3-point latching

Interior Paint Color: ANSI-61 Grey

Exterior Paint Color: ANSI-61 Grey

Paint Standard: C57.12.28

Rear Door Access: Doors

Floor Plate: Yes, cutouts shall be 24" x 12"

Breaker Specifications:

MOC: Yes

TOC: Yes

Control Power Specifications:

Breaker Control Power Source: SPS Supplied 125VDC UPS

Wiring Specifications:

Control Wire Gauge: Standard #14 SIS

Control Wire Color: Gray

CT Wire Gauge: Standard #12 SIS
PT Wire Gauge: Standard #12 SIS
CT Wire Color: Gray
Wire Label Type: Adhesive Wrap Around
Terminal Type: Insulated Ring
Wire Label Text: Number Only

Additional Requirements:

NRTL Label: Yes, CSA-US
Future Expansion: No
Name Plates
33" Termination Height

Shipping Info:

Number of Sections: 8
Approximate Dimensions: 324"W x 96"D x 95"H

One Tie Breaker Section (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

1 – Vacuum breaker, 15kV, 3000 amp, 25kA, 3-cycle, Powell
6 – Current transformers, line side, 2000:5 ratio, C200, Amran
6 – Current transformers, load side, 2000:5 ratio, C200, Amran
1 – Satellite clock, Schweitzer SEL-2407
1 – Real Time Automation Controller, Schweizer SEL-3350#IKP4
1 – Breaker control switch, GE SB-10
1 – Multifunction relay, Schweitzer SEL-751501ACACA70850620
1 – Indicating light, red, GE ET-16
1 – Indicating light, green, GE ET-16
1 – Indicating light, white, GE ET-16
1 – Lot test switches
1 – Lot thermostatically controlled strip heaters
1 – Lot silver-plated copper bus bar

Six Feeder Breaker Sections (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

1 – Vacuum breaker, 15kV, 1200 amp, 25kA, 3-cycle, Powell
3 – Current transformers, line side, 1200:5 ratio, C200, Amran
3 – Current transformers, load side, 2000:5 ratio, C200, Amran
1 – Breaker control switch, GE SB-10
1 – Multifunction relay, Schweitzer SEL-751501ACACA70850620
1 – Indicating light, red, GE ET-16
1 – Indicating light, green, GE ET-16
1 – Indicating light, white, GE ET-16
1 – Meter, Shark 100
1 – Indicating light, GE ET-16, Clear
1 – Lot test switches
1 – Lot thermostatically controlled strip heaters
1 – Lot silver-plated copper bus bar

One Main Breaker Section (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

1 – Vacuum breaker, 15kV, 3000 amp, 25kA, 3-cycle, Powell
6 – Current transformers, line side, 2000:5 ratio, C200, Amran

- 6 – Current transformers, load side, 2000:5 ratio, C200, Amran
- 1 – Breaker control switch, GE SB-10
- 1 – Multifunction relay, Schweitzer SEL-751501ACACA70850620
- 1 – Indicating light, red, GE ET-16
- 1 – Indicating light, green, GE ET-16
- 1 – Indicating light, white, GE ET-16
- 1 – Meter, Schneider Ion 7650
- 1 – Meter, Shark 100
- 1 – Lock out relay, type 24, Electroschwitch
- 1 – Indicating light, GE ET-16, Clear
- 1 – Multifunction relay, Schweitzer SEL-07871X1ACACAA5850220
- 1 – Tap position monitor, INCON 1250B
- 1 – Digital tap position monitor, Beckwith M-2001C
- 1 – Lot test switches
- 1 – Lot thermostatically controlled strip heaters
- 1 – Lot silver-plated copper bus bar

Misc. Equipment

- 6 – SEL-2814M0
- 12 – SEL-2812MRX0
- 12 – SEL-2812MTX0
- 12 – SEL-C808
- 1 – Arc Quench Device SiQuench AQD, 3AM4132-1DA12-0AB2-Z
- 1 – Arc Quench Protective Device, AQ-110PLV-AABA
- 1 – Arc Flash Sensor Relay, AQ-103LV
- 14 – Arc Flash Point Light Sensor, AQ-01C-XXX
- 1 – Arc Quencher Assertion Fiber Cable, AX-001-3
- 1 – Safety + Annunciator Panel w/ Siren
- 1 – Power meter and SOE Recorder, Nexus 1500+
- 1 – AQ System C80 Controller with Ethernet Communications
- 1 – AQ System 10" Color Touchscreen HMI
- 1 – RJ-45 External Port Phoenix Quint Power Supply

Accessories:

- 2 – Charging handles, Powell
- 2 – Racking cranks, Powell
- 1 – Breaker test cabinet, Powell
- 1 – Test jumper, Powell
- 1 – Remote racking device, Powell
- 10 – Remote racking device door bracket, Powell

Power Distribution Center**General Construction:**

PDC will be weatherproof outdoor weather tight construction design with self-supporting / self-framing interlocking panels. Base frame to be fabricated from structural steel channel, wide flange beams and angles forming a self-supporting grid to support the floor or brace for shipment as required.

Nominal Dimensions:

Length: 30' – 0"

Width: 15' – 0"
Ceiling Height: 10' – 0"
Aisle Depth: 6' – 0"

Design:

Classification: General Purpose Non-Hazardous
Roof load: 30 psf International Building Code (latest revision)
Wind load: International Building Code (latest revision)
Floor loading: 250 psf DL + LL
Base deflection L/240
Roof panels: 12 gauge ASTM A653 Minimum
Exterior wall panels: 16 gauge ASTM A653 Minimum
Interior wall panels: 16 gauge ASTM A653
Ceiling panels: 14 gauge ASTM A653
Floor plate: .250" – Mild Steel
Base Frame: ASTM A572 (C10 & Larger) ASTM A36 (C8 & smaller)
Base Frame Coating: Bitumastic
Certified design calculations performed by a professional engineer registered in the state of Florida.
Welding to be in accordance with the latest revision of AWS D1.1 structural welding code.
Paint finish: Acrylic Urethane over rust inhibiting Epoxy Primer to dry build of 3-4 mils. Paint finish meets or exceeds ANSI C57.12.28, Paint Specifications for Pad Mounted Equipment.
Exterior finish color: ANSI #70 Light Gray
Interior finish color: Gloss White
Floor finish color: ANSI #61 Gray with anti-skid

Insulation:

Roof insulation: R-30 Foil Faced Polyisocyanurate Foam Sheathing
Wall insulation: R-19 Foil Faced Polyisocyanurate Foam Sheathing
Floor insulation: R-13 Closed-cell spray applied polyurethane foam

Doors:

2 – Personnel Doors, Single Wide LHRB Door

- 2 - 3'-6" X 8'-0" X 3-1/2" 14ga Galvanneal Single Door Frame
- 2 - 3'-6" X 8'-0" X 1-3/4" 14ga Galvanneal, R9 Insulated Door
- 8 - 4-1/2" X 4-1/2" Standard Weight Hinges
- 2 – Door Closer
- 2 – Crash Chain
- 2 – Panic Push Bar Device
- 2 – Rim Cylinder, with disposable temporary core
- 2 – Lot - Gasket, D-Shaped Bulb Seal, EPDM Sponge Rubber
- 2 – Door limit switches DTE6-2RN2

*Personnel and equipment doors will be provided with temporary construction cores only.

8 – Medium voltage rear access equipment doors

- 14 gauge, Galvanneal
- Pad-lockable door handles
- 3 point latching
- Grade 5 zinc plated hardware
- Door insulation: Foil lined foam board to R-6.5

10 – Danger High Voltage / Keep Out warning sign (or customer specified)

HVAC Equipment:

1 – Bard Manufacturing Company 4 ton HVAC unit or equal Wall mount with 10kW heat (To Be Verified After Receipt of PO)

- 240Vac, 1-phase, 60hz
- Low pressure switch
- High pressure switch
- Low ambient control
- Compressor anti-cycle relay
- Pleated return filter
- R410A refrigerant
- 20 Gauge Galvanized Cabinet

1 – Bard Thermostats

- Automatic or Manual Changeover
- Backlit display
- 5 minute compressor protection
- Separate heating and cooling set points
- Smart recovery (heating mode)
- Non- Programmable

Electrical Utilities:

1 – Interior conduit- exposed EMT conduit with set screw fittings as required by NEC

1 – Power wiring: #12 AWG Type THHN / THWN

1 – Control wiring: #12 AWG Type SIS

1 – HVAC controls: #18 AWG thermostat cable

7 - LED Light Fixtures

- Initial Delivered Lumens @ 25°C Ambient – 3,700
- Input Power - 39W
- E-conolight, E-LWT03

2 – Exterior Light Fixtures - LED

- 1450 - 6850 Lumens (adjustable)
- 120Vac
- Built-In Photocell switch
- Lithonia TWX2-LED-ALO-50K-MVOLT-PE-DDBTXD

2 – Emergency / EXIT lights

- Two 1.8W LED lamps for emergency light
- Test switch
- Status indicator
- Nickel-cadmium backup battery, rechargeable
- Lithonia ECRGC-RD-M6

2 – 3/4 Way Switches, 120 Vac, 20amp

2 – Interior duplex receptacles, 120 Vac,

2 – Exterior duplex receptacles, 120 Vac, GFCI, 20 amp

2 – Weatherproof mounting box

Distribution Panels:

1 – AC panel board

- 1-phase, 3wire

- 120/240 V, 100 amp
 - 18 circuit, 10kAIC
 - Lot breakers as required for utility circuits
 - NEMA1 box
 - NEMA1 cover
 - Square D NQOD
- 1 – Lot of 60 Linear Feet (approximate)
- Ladder Type, Aluminum
 - 24" Wide Cable Tray
 - 7 ¼" Side Rail Height
 - 6" Load Depth
 - 9" Rung Spacing
 - Tray supported every 72" and at splices
 - Strut supports anchored to ceiling
 - All-thread hanger rods
 - Trapeze strut supports

Grounding:

- 4 – Ground pads, 4-hole stainless steel welded to base frame
- 1 – Lot ground drops from ground loop to ground pads as required

Fire Protection:

- 2 – Smoke / Heat detectors
- Gentex 9120
 - Photoelectric type
 - 120Vac with battery back-up
 - Supplied with contacts for remote monitoring.
- 1 - Fire Extinguisher
- Extinguisher Type - Dry Chemical
 - UL Rating - 5B:C
 - Capacity - 11 lb.
 - Extinguish Agent Type - Carbon Dioxide
 - Standards - OSHA Hazard Communication
 - Grainger 4XP83

Accessories:

- 1 – Set of removable lifting lugs with hardware (shipped loose)
- 1 – Lot floor & wall cutouts as required for cables, conduits and cable trays.
- 1 – Lot removable aluminum cover plates for floor cutouts.
- 1 – Fiber Optic Rack, Chatsworth 55053-103

The Following Items Shipped Loose For Field Installation By Others:

- Lifting lugs
- HVAC unit
- Exterior lighting

Stairs and Landings: Not included

Deviations To 15kV Specifications:

- 3.6 – SPS is not ISO-9001 certified however is ISO-9001 compliant.
- 3.8 – SPS is providing CSA-US labeled gear
- 6.3 – SPS is providing Arc mitigation in lieu of Arc Resistant switchgear
- 7.11 – SPS is providing terminations for bottom exit however SPS can provide top exit if required for an additional fee.
- 17.4.6 – SPS is not providing a lifter as all breakers are roll on the floor style.
- 22.2 – SPS to provide drawings and equipment timelines as listed on Attachment A
- 29 – SPS is providing a 5 year warranty as a separate line item, however it is base on time of shipment in lieu of startup

Deviations To Appendix - Metal Clad Switchgear Building

- 1.1 – SPS is providing a building that meets environmental requirements however the building does not meet IECC or ANSI/ASHRAE 90.1.
- 1.6 – SPS is not ISO-9001 certified however is ISO-9001 compliant
- 1.7 – SPS is providing CSA-US labeled gear
- 1.10 – SPS warranty is 5 years after shipment
- 2.1.7 – SPS is not providing a fire alarm panel. Heat detectors are included in the price
- 2.3.2.3 – SPS is providing HVACs that are capable of shutdown however SPS is not providing a fire panel
- 2.11.1 – SPS is providing ANSI 70 gray exterior paint
- 2.11.2 – SPS is providing its standard white paint
- 3.3 – Risk classification III
- 3.4 – Wind importance factor 1.0
- 4.1 – Installation by others
- 6.2 – SPS is providing a 5 year warranty as a separate line item, however it is base on time of shipment in lieu of startup

Clarifications:

- All incoming / outgoing wire, and terminations by others.
- Relay settings coordination & programming by others.
- **Quoted price is for above equipment descriptions & BOM's only, if additional or different components are required the price is subject to change.**
- PDC standard design generally does not meet IECC or ANSI/ASHRAE 90.1, Please contact factory for an updated price if required.
- Personnel and equipment doors will be provided with construction cores only.
- Foundation design by others.
- Seismic mounting and anchoring locations shall be verified by calculations.
- Dimensions & weights shown are approximate only and are not for construction purposes.
- Standard SPS factory production testing is included in the quoted price.
- Field-testing & demonstration are not included in the quoted price but is available contact the factory for rates.
- Switchgear Power Systems standard warranty was quoted, 18 months from ship date or 12 months after energizing equipment (whichever comes first). If SPS is required to put the equipment into storage the warranty period is 18 months starting the date the equipment goes into storage.
- Standard SPS terms and conditions apply.
- Quote price expires in 30 days

Material shortage clause

"The Parties are aware of the shortage of raw materials, electronic components worldwide which is likely to last for the foreseeable future, as well as of market fluctuations in the availability and cost of other raw materials, commodities, other critical components and transportation capacities. Notwithstanding anything to the contrary in the contract/terms and conditions/purchase order, if after the date of SPS's proposal / offer or during the term of the performance of the contract/purchase order there are any changes to availability and / or market conditions for electronic components, raw materials, commodities and transportation capabilities directly or indirectly affecting SPS's performance, SPS shall be entitled to relief in the schedule of the performance or delivery of the directly or indirectly affected scope of work under the contract/purchase order. In such circumstances, the Parties shall meet without delay and discuss in good faith to find a mutually agreeable solution, with equitable adjustment to the contract/purchase order date of delivery or completion. Customer hereby acknowledges and agrees that in said circumstances SPS may not be able to comply with the originally agreed delivery or completion schedule and that SPS shall not be liable for any liquidated or actual damages in connection thereto."

Price Escalation

Due to the uncertainty of raw material price increases, SPS will adopt the following formula in calculating Price Escalation Change Order. $\text{Price Escalation Change Order} = ((\text{PPI at time of SPS Release for Manufacturing} / \text{PPI at time of SPS Quote}) - 1) \times (\text{SPS Accepted Customer PO Price} \times \text{Material Category \%})$. PPI = Bureau of Labor Statistics Producer Price Indexes (PPI) for categories identified below. Price Escalations shall only apply if the Price Escalation Change Order increase is greater than 3%.

1. Sheet Metal PPI Index WPU1017
 - a. 23% of the base price shall be subject to escalation based on increases to this category.
2. Copper PPI Index WPUSI019011
 - a. 7% of the base price shall be subject to escalations based on increases to this category.
3. Circuit Breakers WPU11710143
 - a. 1.5% of the base price shall be subject to escalations based on increases to this category.
4. Relays PCU335314335314
 - a. 2% of the base price shall be subject to escalations based on increases to this category.

ATTACHMENT A

1. Freight terms: Prepaid & Add
2. FOB: Factory
3. Offloading & placement: by others.
4. Any site modifications required to off load or deliver the equipment shall be the responsibility of others.
5. If a steerable trailer is required to ship the equipment additional charges may be applied.
6. Circuit breakers are shipped loose. Installation into PDC and/ or switchgear by others.
7. Uncrating of breakers by others.
8. Export packing by others.
9. Estimated Shipment lead time: 10/2026
10. Estimated Approval Drawing Lead time: 14-16 weeks after receipt of order.
11. Lead times are based on current factory loading at time of quote & current component availability, lead times are subject to change based on current factory loading & current component lead times at receipt of order **and/or at drawing and BOM approval.**
12. Payment terms: Net 30 days

Order Cancellation Fee Schedule:

- 5% fee after receipt of order prior to commencing with approval drawings
- 20% fee after commencing with approval drawings but not submitted.
- 40% fee after release of approval drawings but prior to commencing with production
- 80% fee after commencing with production prior to final test
- 100% fee after commencing with final assembly



JEA

Quote No: 1124-28

Rev. 1

Date: 12/6/24

Ref: College Street Substation

Quoted By	FOB	Shipping Terms	Lead Time	Payment terms
David Diem	See Attachment A	See Attachment A	See Attachment A	See Attachment A

Line Item	Qty	Description	Unit Price	Line Total
1	1	15kV, 3000 amp, Metal Clad Switchgear, NEMA 1 Indoor Construction Per The Description and BOM Listed Below. Northwest Switchgear	\$1,401,585.00	\$1,401,585.00
2	1	15kV, 3000 amp, Metal Clad Switchgear, NEMA 1 Indoor Construction Per The Description and BOM Listed Below. East Switchgear	\$1,395,835.00	\$1,395,835.00
3	1	15kV, 3000 amp, Metal Clad Switchgear, NEMA 1 Indoor Construction Per The Description and BOM Listed Below. West Switchgear	\$1,385,625.00	\$1,385,625.00
4	1	15kV, 3000 amp, Bus Duct, NEMA 1 Indoor Construction Per The Description and BOM Listed Below.	\$1,154,275.00	\$1,154,275.00
5	1 Lot	Freight, 831 College Street, Jacksonville FL	\$183,750.00	\$183,750.00
6	3	Field Supervision / Testing Per Trip	\$19,000.00	\$57,000.00
7	3	Training (Includes 1 8-hr day) Per Trip	\$9,900.00	\$29,700.00
8	1	5-Year Extended Warranty Line Item 1	\$31,850.00	\$31,850.00
9	1	5-Year Extended Warranty Line Item 2	\$23,855.00	\$23,855.00
10	1	5-Year Extended Warranty Line Item 3	\$27,715.00	\$27,715.00
11	1	5-Year Extended Warranty Line Item 4	\$23,085.00	\$23,085.00

Gear Does not meet the requested 6'-8" depth

Please note breakers were not individually labeled for amperage, please confirm if qty of breakers per rating are correct prior to ordering

Switchgear Power Systems, LLC

202 W. Enterprise Rd, Winneconne, WI 54986 Office: 920-582-7277 Fax: 920-582-7270 www.SwitchgearPower.com

Item #1

System Parameters:

Maximum Voltage: 15kV
Nominal Voltage: 13.2kV
Short Circuit Rating: 25kA
Phase sequence: ABC (left to right when standing in front of switchgear)
BIL: 95kV

Bus Specifications:

Main Bus Insulation: Fluidized Bed Epoxy
Main Bus Rating: 3000 amp
Main Bus Material: Two Layer 3/8" x 6" Rounded Edge Copper
Main Bus Plating: Silver
Ground Bus: .25" X 2"
Ground Bus Plating: Silver

Bus Supports:

Inner Unit Bus Supports: Glass Polyester
Insulator Material: Bisphenol-A /Cycloaliphatic

Structure Specifications:

Enclosure Type: Indoor
Enclosure Material: 11 gauge galvalume steel
Front Door Latching: Lift and Turn Pad-lockable with 3-point latching
Interior Paint Color: ANSI-61 Grey
Exterior Paint Color: ANSI-61 Grey
Paint Standard: C57.12.28
Rear Door Access: Doors
Floor Plate: Yes, cutouts shall be 24" x 12"

Breaker Specifications:

MOC: Yes
TOC: Yes

Control Power Specifications:

Breaker Control Power Source: SPS Supplied 125VDC UPS

Wiring Specifications:

Control Wire Gauge: Standard #14 SIS
Control Wire Color: Gray
CT Wire Gauge: Standard #12 SIS
PT Wire Gauge: Standard #12 SIS
CT Wire Color: Gray
Wire Label Type: Adhesive Wrap Around
Terminal Type: Insulated Ring
Wire Label Text: Number Only

Additional Requirements:

NRTL Label: Yes, CSA-US
Future Expansion: No
Name Plates
33" Termination Height

Shipping Info:

Number of Sections: 14
Approximate Dimensions: 504"W x 96"D x 95"H

One Future Main Breaker Section (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

- 1 – Vacuum breaker, 15kV, 3000 amp, 25kA, 3-cycle, Powell
- 3 – Current transformers, line side, 3000:5 ratio, C200, Amran
- 3 – Current transformers, load side, 3000:5 ratio, C200, Amran
- 1 – Breaker control switch, GE SB-10
- 1 – Multifunction relay, Schweitzer SEL-751501ACACA70850620
- 1 – Indicating light, red, GE ET-16
- 1 – Indicating light, green, GE ET-16
- 1 – Indicating light, white, GE ET-16
- 1 – Meter, Schneider Ion 7650
- 1 – Meter, Shark 100
- 1 – Lock out relay, type 24, Electroschwitch
- 1 – Indicating light, GE ET-16, Clear
- 1 – Multifunction relay, Schweitzer SEL-07871X1ACACAA5850220
- 1 – Tap position monitor, INCON 1250B
- 1 – Digital tap position monitor, Beckwith M-2001C
- 1 – Lot test switches
- 1 – Lot thermostatically controlled strip heaters
- 1 – Lot silver-plated copper bus bar

Two Main Breaker Sections (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

- 1 – Vacuum breaker, 15kV, 3000 amp, 25kA, 3-cycle, Powell
- 3 – Current transformers, line side, 3000:5 ratio, C200, Amran
- 3 – Current transformers, load side, 3000:5 ratio, C200, Amran
- 1 – Breaker control switch, GE SB-10
- 1 – Multifunction relay, Schweitzer SEL-751501ACACA70850620
- 1 – Indicating light, red, GE ET-16
- 1 – Indicating light, green, GE ET-16
- 1 – Indicating light, white, GE ET-16
- 1 – Meter, Schneider Ion 7650
- 1 – Meter, Shark 100
- 1 – Lock out relay, type 24, Electroschwitch
- 1 – Indicating light, GE ET-16, Clear
- 1 – Multifunction relay, Schweitzer SEL-07871X1ACACAA5850220
- 1 – Tap position monitor, INCON 1250B
- 1 – Digital tap position monitor, Beckwith M-2001C
- 1 – Lot test switches
- 1 – Lot thermostatically controlled strip heaters
- 1 – Lot silver-plated copper bus bar

Ten Feeder Breaker Sections (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

- 1 – Vacuum breaker, 15kV, 1200 amp, 25kA, 3-cycle, Powell
- 3 – Current transformers, line side, 1200:5 ratio, C200, Amran
- 3 – Current transformers, load side, 2000:5 ratio, C200, Amran
- 1 – Breaker control switch, GE SB-10
- 1 – Multifunction relay, Schweitzer SEL-751501ACACA70850620
- 1 – Indicating light, red, GE ET-16
- 1 – Indicating light, green, GE ET-16
- 1 – Indicating light, white, GE ET-16
- 1 – Meter, Shark 100
- 1 – Indicating light, GE ET-16, Clear
- 1 – Lot test switches
- 1 – Lot thermostatically controlled strip heaters
- 1 – Lot silver-plated copper bus bar

One Auxiliary Section (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

- 1 – Potential transformer drawer, drawout, 15kV, Eaton
- 3 – Potential transformers, 8400:120V, ABB or equal
- 1 – Fuse drawer, drawout, 15kV, Eaton
- 1 – Lot test switches
- 1 – Lot thermostatically controlled strip heaters
- 1 – Lot silver-plated copper bus bar

Misc. Equipment

- 12 – SEL-2814M0
- 24 – SEL-2812MRX0
- 24 – SEL-2812MTX0
- 24 – SEL-C808
- 2 – Arc Quench Device SiQuench AQD, 3AM4132-1DA12-0AB2-Z
- 2 – Arc Quench Protective Device, AQ-110PLV-AABA
- 2 – Arc Flash Sensor Relay, AQ-103LV
- 28 – Arc Flash Point Light Sensor, AQ-01C-XXX
- 2 – Arc Quencher Assertion Fiber Cable, AX-001-3
- 2 – Safety + Annunciator Panel w/ Siren
- 2 – Power meter and SOE Recorder, Nexus 1500+
- 2 – AQ System C80 Controller with Ethernet Communications
- 2 – AQ System 10" Color Touchscreen HMI
- 2 – RJ-45 External Port Phoenix Quint Power Supply

Accessories:

- 2 – Charging handles, Powell
- 2 – Racking cranks, Powell
- 1 – Breaker test cabinet, Powell
- 1 – Test jumper, Powell
- 1 – Remote racking device, Powell
- 13 – Remote racking device door bracket, Powell

Item #2 East Switchgear

System Parameters:

Maximum Voltage: 15kV

Nominal Voltage: 13.2kV

Short Circuit Rating: 25kA

Phase sequence: ABC (left to right when standing in front of switchgear)

BIL: 95kV

Bus Specifications:

Main Bus Insulation: Fluidized Bed Epoxy

Main Bus Rating: 3000 amp

Main Bus Material: Two Layer 3/8" x 6" Rounded Edge Copper

Main Bus Plating: Silver

Ground Bus: .25" X 2"

Ground Bus Plating: Silver

Bus Supports:

Inner Unit Bus Supports: Glass Polyester

Insulator Material: Bisphenol-A /Cycloaliphatic

Structure Specifications:

Enclosure Type: Indoor

Enclosure Material: 11 gauge galvalume steel

Front Door Latching: Lift and Turn Pad-lockable with 3-point latching

Interior Paint Color: ANSI-61 Grey

Exterior Paint Color: ANSI-61 Grey

Paint Standard: C57.12.28

Rear Door Access: Doors

Floor Plate: Yes, cutouts shall be 24" x 12"

Breaker Specifications:

MOC: Yes

TOC: Yes

Control Power Specifications:

Breaker Control Power Source: SPS Supplied 125VDC UPS

Wiring Specifications:

Control Wire Gauge: Standard #14 SIS

Control Wire Color: Gray

CT Wire Gauge: Standard #12 SIS

PT Wire Gauge: Standard #12 SIS

CT Wire Color: Gray

Wire Label Type: Adhesive Wrap Around

Terminal Type: Insulated Ring

Wire Label Text: Number Only

Additional Requirements:

NRTL Label: Yes, CSA-US
Future Expansion: No
Name Plates
33" Termination Height

Shipping Info:

Number of Sections: 13
Approximate Dimensions: 468"W x 96"D x 95"H

Seven Feeder Breaker Sections (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

- 1 – Vacuum breaker, 15kV, 1200 amp, 25kA, 3-cycle, Powell
- 3 – Current transformers, line side, 1200:5 ratio, C200, Amran
- 3 – Current transformers, load side, 2000:5 ratio, C200, Amran
- 1 – Breaker control switch, GE SB-10
- 1 – Multifunction relay, Schweitzer SEL-751501ACACA70850620
- 1 – Indicating light, red, GE ET-16
- 1 – Indicating light, green, GE ET-16
- 1 – Indicating light, white, GE ET-16
- 1 – Meter, Shark 100
- 1 – Indicating light, GE ET-16, Clear
- 1 – Lot test switches
- 1 – Lot thermostatically controlled strip heaters
- 1 – Lot silver-plated copper bus bar

One Feeder Breaker Section (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

- 1 – Vacuum breaker, 15kV, 1200 amp, 25kA, 3-cycle, Powell
- 3 – Current transformers, line side, 1200:5 ratio, C200, Amran
- 3 – Current transformers, load side, 2000:5 ratio, C200, Amran
- 6 – Current transformers, load side, 600:5 ratio, C100, Amran
- 1 – Breaker control switch, GE SB-10
- 1 – Multifunction relay, Schweitzer SEL-751501ACACA70850620
- 1 – Indicating light, red, GE ET-16
- 1 – Indicating light, green, GE ET-16
- 1 – Indicating light, white, GE ET-16
- 1 – Meter, Shark 100
- 1 – Indicating light, GE ET-16, Clear
- 1 – Lot test switches
- 1 – Lot thermostatically controlled strip heaters
- 1 – Lot silver-plated copper bus bar

One Tie Breaker Section (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

- 1 – Vacuum breaker, 15kV, 3000 amp, 25kA, 3-cycle, Powell
- 3 – Current transformers, line side, 2000:5 ratio, C200, Amran
- 3 – Current transformers, load side, 2000:5 ratio, C200, Amran
- 1 – Satellite clock, Schweitzer SEL-2407
- 1 – Real Time Automation Controller, Schweizer SEL-3350#IKP4
- 1 – Breaker control switch, GE SB-10
- 1 – Multifunction relay, Schweitzer SEL-751501ACACA70850620
- 1 – Indicating light, red, GE ET-16
- 1 – Indicating light, green, GE ET-16

- 1 - Indicating light, white, GE ET-16
- 1 – Lot test switches
- 1 – Lot thermostatically controlled strip heaters
- 1 – Lot silver-plated copper bus bar

One Main Breaker Section (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

- 1 – Vacuum breaker, 15kV, 3000 amp, 25kA, 3-cycle, Powell
- 6 – Current transformers, line side, 2000:5 ratio, C200, Amran
- 6 – Current transformers, load side, 2000:5 ratio, C200, Amran
- 1 – Breaker control switch, GE SB-10
- 1 – Multifunction relay, Schweitzer SEL-751501ACACA70850620
- 1 – Indicating light, red, GE ET-16
- 1 – Indicating light, green, GE ET-16
- 1 – Indicating light, white, GE ET-16
- 1 – Meter, Schneider Ion 7650
- 1 – Meter, Shark 100
- 1 – Lock out relay, type 24, Electroschalt
- 1 – Indicating light, GE ET-16, Clear
- 1 – Multifunction relay, Schweitzer SEL-07871X1ACACAA5850220
- 1 – Tap position monitor, INCON 1250B
- 1 – Digital tap position monitor, Beckwith M-2001C
- 1 – Lot test switches
- 1 – Lot thermostatically controlled strip heaters
- 1 – Lot silver-plated copper bus bar

One Tie Breaker Section (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

- 1 – Vacuum breaker, 15kV, 3000 amp, 25kA, 3-cycle, Powell
- 3 – Current transformers, line side, 2000:5 ratio, C200, Amran
- 3 – Current transformers, load side, 2000:5 ratio, C200, Amran
- 1 – Satellite clock, Schweitzer SEL-2407
- 1 – Real Time Automation Controller, Schweizer SEL-3350#IKP4
- 1 – Breaker control switch, GE SB-10
- 1 – Multifunction relay, Schweitzer SEL-751501ACACA70850620
- 1 – Indicating light, red, GE ET-16
- 1 – Indicating light, green, GE ET-16
- 1 – Indicating light, white, GE ET-16
- 1 – Lot test switches
- 1 – Lot thermostatically controlled strip heaters
- 1 – Lot silver-plated copper bus bar

One Auxiliary Section (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

- 1 – Potential transformer drawer, drawout, 15kV, Eaton
- 3 – Potential transformers, 8400:120V, ABB or equal
- 1 – Lot thermostatically controlled strip heaters
- 1 – Lot silver-plated copper bus bar

One Auxiliary Section (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

- 1 – Fuse drawer, drawout, 15kV, Eaton
- 1 – Lot test switches
- 1 – Lot thermostatically controlled strip heaters

1 – Lot silver-plated copper bus bar

Misc. Equipment

12 – SEL-2814M0

24 – SEL-2812MRX0

24 – SEL-2812MTX0

24 – SEL-C808

2 – Arc Quench Device SiQuench AQD, 3AM4132-1DA12-0AB2-Z

2 – Arc Quench Protective Device, AQ-110PLV-AABA

2 – Arc Flash Sensor Relay, AQ-103LV

28 – Arc Flash Point Light Sensor, AQ-01C-XXX

2 – Arc Quencher Assertion Fiber Cable, AX-001-3

2 – Safety + Annunciator Panel w/ Siren

2 – Power meter and SOE Recorder, Nexus 1500+

2 – AQ System C80 Controller with Ethernet Communications

2 – AQ System 10" Color Touchscreen HMI

2 – RJ-45 External Port Phoenix Quint Power Supply

Accessories:

2 – Charging handles, Powell

2 – Racking cranks, Powell

1 – Breaker test cabinet, Powell

1 – Test jumper, Powell

1 – Remote racking device, Powell

11 – Remote racking device door bracket, Powell

Item #3 West Switchgear

System Parameters:

Maximum Voltage: 15kV
Nominal Voltage: 13.2kV
Short Circuit Rating: 25kA
Phase sequence: ABC (left to right when standing in front of switchgear)
BIL: 95kV

Bus Specifications:

Main Bus Insulation: Fluidized Bed Epoxy
Main Bus Rating: 3000 amp
Main Bus Material: Two Layer 3/8" x 6" Rounded Edge Copper
Main Bus Plating: Silver
Ground Bus: .25" X 2"
Ground Bus Plating: Silver

Bus Supports:

Inner Unit Bus Supports: Glass Polyester
Insulator Material: Bisphenol-A /Cycloaliphatic

Structure Specifications:

Enclosure Type: Indoor
Enclosure Material: 11 gauge galvalume steel
Front Door Latching: Lift and Turn Pad-lockable with 3-point latching
Interior Paint Color: ANSI-61 Grey
Exterior Paint Color: ANSI-61 Grey
Paint Standard: C57.12.28
Rear Door Access: Doors
Floor Plate: Yes, cutouts shall be 24" x 12"

Breaker Specifications:

MOC: Yes
TOC: Yes

Control Power Specifications:

Breaker Control Power Source: SPS Supplied 125VDC UPS

Wiring Specifications:

Control Wire Gauge: Standard #14 SIS
Control Wire Color: Gray
CT Wire Gauge: Standard #12 SIS
PT Wire Gauge: Standard #12 SIS
CT Wire Color: Gray
Wire Label Type: Adhesive Wrap Around
Terminal Type: Insulated Ring
Wire Label Text: Number Only

Additional Requirements:

NRTL Label: Yes, CSA-US
Future Expansion: No
Name Plates
33" Termination Height

Shipping Info:

Number of Sections: 14
Approximate Dimensions: 504"W x 96"D x 95"H

Eleven Feeder Breaker Sections (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

- 1 – Vacuum breaker, 15kV, 1200 amp, 25kA, 3-cycle, Powell
- 3 – Current transformers, line side, 1200:5 ratio, C200, Amran
- 3 – Current transformers, load side, 2000:5 ratio, C200, Amran
- 1 – Breaker control switch, GE SB-10
- 1 – Multifunction relay, Schweitzer SEL-751501ACACA70850620
- 1 – Indicating light, red, GE ET-16
- 1 – Indicating light, green, GE ET-16
- 1 – Indicating light, white, GE ET-16
- 1 – Meter, Shark 100
- 1 – Indicating light, GE ET-16, Clear
- 1 – Lot test switches
- 1 – Lot thermostatically controlled strip heaters
- 1 – Lot silver-plated copper bus bar

Two Main Breaker Section (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

- 1 – Vacuum breaker, 15kV, 3000 amp, 25kA, 3-cycle, Powell
- 6 – Current transformers, line side, 2000:5 ratio, C200, Amran
- 6 – Current transformers, load side, 2000:5 ratio, C200, Amran
- 1 – Breaker control switch, GE SB-10
- 1 – Multifunction relay, Schweitzer SEL-751501ACACA70850620
- 1 – Indicating light, red, GE ET-16
- 1 – Indicating light, green, GE ET-16
- 1 – Indicating light, white, GE ET-16
- 1 – Meter, Schneider Ion 7650
- 1 – Meter, Shark 100
- 1 – Lock out relay, type 24, Electroschwitch
- 1 – Indicating light, GE ET-16, Clear
- 1 – Multifunction relay, Schweitzer SEL-07871X1ACACAA5850220
- 1 – Tap position monitor, INCON 1250B
- 1 – Digital tap position monitor, Beckwith M-2001C
- 1 – Lot test switches
- 1 – Lot thermostatically controlled strip heaters
- 1 – Lot silver-plated copper bus bar

One Auxiliary Section (Approximate Dimensions: 36"W x 96"D x 95"H) Shall Be Supplied With The Following:

- 1 – Potential transformer drawer, drawout, 15kV, Eaton
- 3 – Potential transformers, 8400:120V, ABB or equal

- 1 – Fuse drawer, drawout, 15kV, Eaton
- 1 – Lot test switches
- 1 – Lot thermostatically controlled strip heaters
- 1 – Lot silver-plated copper bus bar

Misc. Equipment

- 6 – SEL-2814M0
- 12 – SEL-2812MRX0
- 12 – SEL-2812MTX0
- 12 – SEL-C808
- 1 – Arc Quench Device SiQuench AQD, 3AM4132-1DA12-0AB2-Z
- 1 – Arc Quench Protective Device, AQ-110PLV-AABA
- 1 – Arc Flash Sensor Relay, AQ-103LV
- 14 – Arc Flash Point Light Sensor, AQ-01C-XXX
- 1 – Arc Quencher Assertion Fiber Cable, AX-001-3
- 1 – Safety + Annunciator Panel w/ Siren
- 1 – Power meter and SOE Recorder, Nexus 1500+
- 1 – AQ System C80 Controller with Ethernet Communications
- 1 – AQ System 10" Color Touchscreen HMI
- 1 – RJ-45 External Port Phoenix Quint Power Supply

Accessories:

- 2 – Charging handles, Powell
- 2 – Racking cranks, Powell
- 1 – Breaker test cabinet, Powell
- 1 – Test jumper, Powell
- 1 – Remote racking device, Powell
- 10 – Remote racking device door bracket, Powell

Deviations To 15kV Specifications:

- 3.6 – SPS is not ISO-9001 certified however is ISO-9001 compliant.
- 3.8 – SPS is providing CSA-US labeled gear
- 6.3 – SPS is providing Arc mitigation in lieu of Arc Resistant switchgear
- 7.11 – SPS is providing terminations for bottom exit however SPS can provide top exit if required for an additional fee.
- 17.4.6 – SPS is not providing a lifter as all breakers are roll on the floor style.
- 22.2 – SPS to provide drawings and equipment timelines as listed on Attachment A
- 29 – SPS is providing a 5 year warranty as a separate line item, however it is base on time of shipment in lieu of startup

Deviations To Appendix - Metal Clad Switchgear Building

- 1.1 – SPS is providing a building that meets environmental requirements however the building does not meet IECC or ANSI/ASHRAE 90.1.
- 1.6 – SPS is not ISO-9001 certified however is ISO-9001 compliant
- 1.7 – SPS is providing CSA-US labeled gear
- 1.10 – SPS warranty is 5 years after shipment
- 2.1.7 – SPS is not providing a fire alarm panel. Heat detectors are included in the price
- 2.3.2.3 – SPS is providing HVACs that are capable of shutdown however SPS is not providing a fire panel
- 2.11.1 – SPS is providing ANSI 70 gray exterior paint
- 2.11.2 – SPS is providing its standard white paint
- 3.3 – Risk classification III
- 3.4 – Wind importance factor 1.0
- 4.1 – Installation by others
- 6.2 – SPS is providing a 5 year warranty as a separate line item, however it is base on time of shipment in lieu of startup

Bus Duct:

All wall penetrations by others

Clarifications:

- All incoming / outgoing wire, and terminations by others.
- Relay settings coordination & programming by others.
- **Quoted price is for above equipment descriptions & BOM's only, if additional or different components are required the price is subject to change.**
- **SPS is assuming that control power transformers are external, SPS only providing fuse drawers**
- PDC standard design generally does not meet IECC or ANSI/ASHRAE 90.1, Please contact factory for an updated price if required.
- Personnel and equipment doors will be provided with construction cores only.
- Foundation design by others.
- Seismic mounting and anchoring locations shall be verified by calculations.
- Dimensions & weights shown are approximate only and are not for construction purposes.
- Standard SPS factory production testing is included in the quoted price.
- Field-testing & demonstration are not included in the quoted price but is available contact the factory for rates.
- Switchgear Power Systems standard warranty was quoted, 18 months from ship date or 12 months after energizing equipment (whichever comes first). If SPS is required to put the equipment into storage the warranty period is 18 months starting the date the equipment goes into storage.
- Standard SPS terms and conditions apply.
- Quote price expires in 30 days

Material shortage clause

"The Parties are aware of the shortage of raw materials, electronic components worldwide which is likely to last for the foreseeable future, as well as of market fluctuations in the availability and cost of other raw materials, commodities, other critical components and transportation capacities. Notwithstanding anything to the contrary in the contract/terms and conditions/purchase order, if after the date of SPS's proposal / offer or during the term of the performance of the contract/purchase order there are any changes to availability and / or market conditions for electronic components, raw materials, commodities and transportation capabilities directly or indirectly affecting SPS's performance, SPS shall be entitled to relief in the schedule of the performance or delivery of the directly or indirectly affected scope of work under the contract/purchase order. In such circumstances, the Parties shall meet without delay and discuss in good faith to find a mutually agreeable solution, with equitable adjustment to the contract/purchase order date of delivery or completion. Customer hereby acknowledges and agrees that in said circumstances SPS may not be able to comply with the originally agreed delivery or completion schedule and that SPS shall not be liable for any liquidated or actual damages in connection thereto."

Price Escalation

Due to the uncertainty of raw material price increases, SPS will adopt the following formula in calculating Price Escalation Change Order. $\text{Price Escalation Change Order} = ((\text{PPI at time of SPS Release for Manufacturing} / \text{PPI at time of SPS Quote}) - 1) \times (\text{SPS Accepted Customer PO Price} \times \text{Material Category \%})$. PPI = Bureau of Labor Statistics Producer Price Indexes (PPI) for categories identified below. Price Escalations shall only apply if the Price Escalation Change Order increase is greater than 3%.

1. Sheet Metal PPI Index WPU1017
 - a. 23% of the base price shall be subject to escalation based on increases to this category.
2. Copper PPI Index WPUSI019011
 - a. 7% of the base price shall be subject to escalations based on increases to this category.
3. Circuit Breakers WPU11710143
 - a. 1.5% of the base price shall be subject to escalations based on increases to this category.
4. Relays PCU335314335314
 - a. 2% of the base price shall be subject to escalations based on increases to this category.

ATTACHMENT A

1. Freight terms: Prepaid & Add
2. FOB: Factory
3. Offloading & placement: by others.
4. Any site modifications required to off load or deliver the equipment shall be the responsibility of others.
5. If a steerable trailer is required to ship the equipment additional charges may be applied.
6. Circuit breakers are shipped loose. Installation into PDC and/ or switchgear by others.
7. Uncrating of breakers by others.
8. Export packing by others.
9. Estimated Shipment lead time: East Switchgear - 9/26, West Switchgear- 11/26, NW Switchgear 1/27
10. Estimated Approval Drawing Lead time: 14-16 weeks after receipt of order.
11. Lead times are based on current factory loading at time of quote & current component availability, lead times are subject to change based on current factory loading & current component lead times at receipt of order **and/or at drawing and BOM approval.**
12. Payment terms: Net 30 days

Order Cancellation Fee Schedule:

- 5% fee after receipt of order prior to commencing with approval drawings
- 20% fee after commencing with approval drawings but not submitted.
- 40% fee after release of approval drawings but prior to commencing with production
- 80% fee after commencing with production prior to final test
- 100% fee after commencing with final assembly

#	1411829647 (RFP) 15kV Substation Switchgear Projects							
	Vendor Rankings	Evaluator A	Evaluator B	Evaluator C	Evaluator D	Σ Rank	Total Score	Rank
1	Powell Electrical Systems	2	1	1	1	5	339.52	1
2	Switchgear Power Systems	1	2	2	2	7	307.00	2
#	Evaluator A	Quotation of Rates (40 Points)	Past Performance/Company Experience (30 Points)	Design Approach and Workplan (30 Points)			Total	Rank
1	Powell Electrical Systems	37.38	22.00	26.00			85.38	2
2	Switchgear Power Systems	40.00	25.00	25.00			90.00	1
	Evaluator B	Quotation of Rates (40 Points)	Past Performance/Company Experience (30 Points)	Design Approach and Workplan (30 Points)			Total	Rank
1	Powell Electrical Systems	37.38	24.00	30.00			91.38	1
2	Switchgear Power Systems	40.00	19.00	24.00			83.00	2
	Evaluator C	Quotation of Rates (40 Points)	Past Performance/Company Experience (30 Points)	Design Approach and Workplan (30 Points)			Total	Rank
1	Powell Electrical Systems	37.38	17.00	27.00			81.38	1
2	Switchgear Power Systems	40.00	9.00	12.00			61.00	2
	Evaluator D	Quotation of Rates (40 Points)	Past Performance/Company Experience (30 Points)	Design Approach and Workplan (30 Points)			Total	Rank
1	Powell Electrical Systems	37.38	20.00	24.00			81.38	1
2	Switchgear Power Systems	40.00	18.00	15.00			73.00	2
	Overall Averages	Staff Experience (40 Points)	Past Performance/Company Experience (30 Points)	Design Approach and Workplan (30 Points)			Total	Rank
1	Powell Electrical Systems	37.38	20.75	26.75			84.88	1
2	Switchgear Power Systems	40.00	17.75	19.00			76.75	2

Bid Forms



PICKETT®
an ESP COMPANY



Appendix B Proposal Form

COMPANY INFORMATION:

COMPANY NAME: Pickett and Associates, LLC
BUSINESS ADDRESS: 10151 Deerwood Park Boulevard, Building 100, Suite 110
CITY, STATE, ZIP CODE: Jacksonville, FL 32256
TELEPHONE: 813.877.7770
EMAIL OF CONTACT: tbennett@pickettusa.com

☒ I have read and understood the Sunshine Law/Public Records clauses contained within this solicitation. I understand that in the absence of a redacted copy my proposal will be disclosed to the public "as-is".

The Company shall submit one electronic copy of the signed proposal documents on the sourcing platform, prior to the Bid Due Date and Time.

Company's Certification

By submitting this Proposal, the Company certifies that the Company has read and reviewed all of the documents pertaining to this RFP and agrees to abide by the terms and conditions set forth therein, that the person signing below is an authorized representative of the Company, that the Company is legally authorized to do business in the State of Florida, and that the Company maintains in active status an appropriate license for the work.

The Company certifies, under penalty of perjury, that it holds all licenses, permits, certifications, insurances, bonds and other credentials required by law, Contract or practice to perform the Work. The Company also certifies that, upon the prospect of any change in the status of applicable licenses, permits, certifications, insurances, bonds or other credentials, the Company shall immediately notify JEA of status change.

We have received addenda 1 through 1



Signature of Authorize Officer of Firm or Agent

8.27.24

Date

Tom Bennett, PE, PMP, Vice President

Printed Name & Title

813.877.7770

Phone Number

**Appendix B Minimum Qualifications Form
GENERAL**

THE MINIMUM QUALIFICATIONS SHALL BE SUBMITTED ON THIS FORM. IN ORDER TO BE CONSIDERED A QUALIFIED PROPOSER BY JEA YOU MUST MEET THE MINIMUM QUALIFICATIONS LISTED BELOW, AND BE ABLE TO PROVIDE ALL THE SERVICES LISTED IN THIS SOLICITATION.

THE PROPOSER MUST COMPLETE THE COMPANY INFORMATION SECTION BELOW AND PROVIDE ANY OTHER INFORMATION OR REFERENCE REQUESTED. THE PROPOSER MUST ALSO PROVIDE ANY ATTACHMENTS REQUESTED WITH THIS MINIMUM QUALIFICATIONS FORM.

PLEASE SUBMIT AN ELECTRONIC COPY OF THIS FORM AND ANY REQUESTED ADDITIONAL DOCUMENTATION WITH THE BID SUBMISSION.

COMPANY INFORMATION

COMPANY NAME: Pickett and Associates, LLC

BUSINESS ADDRESS: 10151 Deerwood Park Boulevard, Building 100, Suite 110

CITY, STATE, ZIP CODE: Jacksonville, FL 32256

TELEPHONE: 813.877.7770

E-MAIL: tbenett@pickettusa.com

PRINT NAME OF AUTHORIZED REPRESENTATIVE: Tom Bennett, PE, PMP, Vice President

SIGNATURE OF AUTHORIZED REPRESENTATIVE: 

NAME AND TITLE OF AUTHORIZED REPRESENTATIVE: Tom Bennett, PE, PMP, Vice President

Respondent must meet the following Minimum Qualifications to be considered eligible to have its Response evaluated by JEA. Respondent must complete and submit the Minimum Qualification Form provided in this Solicitation. Respondents that are working or have worked for JEA in the past 2 years involving similar work must submit JEA as a reference. JEA reserves the right to ask for additional back up documentation or additional reference projects to confirm the Respondent meets the requirements stated above.

JEA may reject Responses from Respondents not meeting all of the following Minimum Qualifications:

The Proposer must have successfully completed two (2) similar overhead distribution and two (2) similar underground distribution substation projects, within the last five (5) years as of the proposal due date.

A similar overhead distribution project is defined as:

- A distribution engineering design project of a 13kV or higher overhead distribution line with an engineering contract value greater than \$100,000.

A similar underground distribution project is defined as:

- A distribution engineering design project of a 13kV or higher underground distribution line with an engineering contract value greater than \$100,000.

Any Respondent whose contract with JEA was terminated for default within the last two years shall have its Response rejected.

Project Overhead Distribution Engineering Design 1

Reference Company Name Florida Power & Light

Reference Contact Person Name Shawn Hansen, P.E.

Reference Contact Person Phone Number (561) 904-3313

Reference Contact Person E-Mail Address Shawn.Hansen@fpl.com

Date Work Began/Date Work Complete 2022 - Present

Contract Value \$467,030

Description of Project SR-70 Seville to Whidden

The project is strategically designed to improve infrastructural connectivity and reliability through the reconstruction of 7.9 miles of Florida Power & Light (FPL) distribution lines, the relocation of 29.14 miles of existing lines, and the co-location of 17.59 miles of distribution infrastructure adjacent to a 230 kV transmission line. This project aims to modernize and optimize the electrical grid to meet increasing demand while adhering to the spatial constraints imposed by the refurbishment of the transmission line.

The initiative utilized a value engineering approach for the reconstruction and relocation of distribution lines, emphasizing the co-location of infrastructure with the transmission line to enhance operational efficiencies and promote the reuse of existing poles, thereby reducing environmental and construction impacts. The project included comprehensive route evaluation, interdisciplinary coordination, design engineering, preparation of the bill of materials, procurement facilitation, and construction oversight.

Our team conducted detailed analyses, including deflection assessments and pole loading calculations, along with evaluations of existing poles to ensure compliance with client-specific standards and applicable regulatory codes. Design work included seven underground riser transfers, material take-offs, and sequencing of outages to minimize impacts. Due to the relocation of the line, voltage drop and flicker analyses were performed on transformers and secondary lines to verify sizing and implement upgrades as necessary.

Close collaboration with key stakeholders, integration of Geographic Information Systems (GIS) technology, and coordination with FPL's operational systems were essential for the effective execution of this project. By fostering strong partnerships with FPL personnel, regulatory agencies, and landowners, we ensured alignment with project objectives while meeting all regulatory requirements.

Project Overhead Distribution Engineering Design 2

Reference Company Name NextEra Energy

Reference Contact Person Name Natalie Borrelli

Reference Contact Person Phone Number 954-321-2073

Reference Contact Person E-Mail Address Natalie.Borrelli@fpl.com

Date Work Began/Date Work Complete 2018-2021

Contract Value Surveying, Engineering: \$7M, Construction: >\$500M

Description of Project North Florida Resiliency Connection (NFRC)

This project consisted of the overall engineering of a 176-mile, 161kV transmission line from Florida Power & Light's (FPL) Raven Substation in Lake City, FL to Gulf Power Sinai Cemetery Substation near Chattahoochee, FL. The project included 22-miles of distribution rebuilds, relocations, and under-build to transmission structures for six different utilities. Utilities included Florida Power and Light, Duke Energy Florida, Clay Electric Cooperative, Talquin Electric Cooperative, Suwannee Valley Electric Cooperative, and Tri-County Electric Cooperative.

Pickett was hired to perform LiDAR, surveying, real estate support, public outreach support, project management, multi-disciplined engineering, construction support and as-built activities associated with this project. Our team hired several subcontractors to support geotechnical investigations, geological investigations, SUE surveying, and electrical studies.

Project Underground Distribution Engineering Design 1

Reference Company Name Florida Power & Light
Reference Contact Person Name Luca Fasani
Reference Contact Person Phone Number 561-904-3320
Reference Contact Person E-Mail Address luca.fasani@fpl.com
Date Work Began/Date Work Complete 03/04/2022-01/02/2024
Contract Value \$100k
Description of Project Ryder-Skypass

Coordination and oversight of design and construction support activities related to the installation of a 12.5-mile underbuilt electrical distribution line, which will be positioned beneath an existing 138 kV transmission line. This project also includes the execution of eleven installations of underground riser cable transfer systems aimed at enhancing operational efficiency. The initiative necessitated a strategic relocation of an underground feeder riser pole 200 linear feet to the north, towards a pole located at the intersection of Jog Road and Beeline Highway. Furthermore, it involved the systematic transition of 1,000 linear feet of overhead feeder lines to underground infrastructure within the jurisdiction of the Florida Department of Transportation (FDOT) right-of-way at the intersection of Beeline Highway and PGA Boulevard. Our team also designed and coordinated the construction of 300 linear feet of underground secondary conduit to facilitate electrical connections to a traffic signal at the same intersection. We provided comprehensive support to FDOT and the client for outage and transfer coordination.

Additionally, we oversaw a project focused on the underground conversion of 3,500 linear feet of overhead electrical distribution lines to underground configurations adjacent to an established aquatic canal, with careful attention to environmental impact assessments. This initiative includes the installation of a switch cabinet designed to sectionalize three feeders and simultaneously supply power to a three-phase Pad Mounted Transformer (PMTX) electrical system, ensuring all operational processes are fully compliant with required permitting and authorizations from relevant county administrative bodies, the Florida Department of Transportation (FDOT), the Lake Worth Drainage District (LWDD), and applicable environmental regulations. We have initiated a permit application for subterranean construction in accordance with Palm Beach County regulations and implemented a compliance training program regarding Florida Power and Light (FPL) standards and protocols. Additionally, we have secured a permit for canal-related activities and initiated the permit application process for the jurisdictional area encompassing Haverhill Road and 45th Street. We have also prepared and submitted a Florida Department of Transportation (FDOT) permit application for construction or modifications along Bee Line Highway. Finally, we are conducting evaluations and assessments of pole boring operations to ensure compliance with structural integrity standards and specifications.

Project Underground Distribution Engineering Design 2

Reference Company Name Aubrey Silvery Enterprises

Reference Contact Person Name Kelley Pollard, PE

Reference Contact Person Phone Number 770-537-1144

Reference Contact Person E-Mail Address kpollard@silvery.com

Date Work Began/Date Work Complete April 2020 - February 2021

Contract Value \$115,621

Description of Project Maiden Solar Creek

The Maiden Creek Solar Farm project in Catawba County, North Carolina, is in the implementation phase, aimed at enhancing renewable energy infrastructure. It involves the engineering, procurement, and construction (EPC) of a 7,200-linear-foot, 34.5 kV double circuit electrical distribution line to connect the solar farm to the regional energy grid. Pickett and Associates, LLC (Pickett) was engaged for specialized engineering services to ensure compliance with Duke Energy Corporation's technical specifications.

The initial phase included a comprehensive topographic and boundary survey by a surveyor, serving as a foundation for a comprehensive design and relevant construction documentation. The engineering design process employed advanced PLS CADD software for high-precision drawings, a detailed Bill of Materials, and an extensive work package for efficient construction operations.

Engineering support services were structured for seamless integration into the regional grid, beginning with thorough reconnaissance and field surveys to establish essential geospatial coordinates. This preparation ensured accurate staking and alignment with the site's characteristics. Following the foundational work, our team advanced to engineering design, utilizing geomorphological and topographical datasets to strategically position structural components. Interdisciplinary collaboration was essential, as we worked closely with Aubrey Silvey and the solar project developer to refine design parameters for optimal structural placement. In designing the underground distribution network, we focused on creating specifications for approximately 1,000 linear feet of conduit, ensuring adherence to high engineering standards. Detailed plan and profile drawings provided precise visualizations of the structural layout.

Safety and compliance were prioritized, leading to thorough clearance assessments and obtaining the necessary NCDOT Road Crossing Utility permit for the Jack and Bore operation beneath Providence Mill Road. We incorporated revised schematics to meet trenching protocols and performed sag and tension analyses to enhance wire stringing methodologies. Recognizing the importance of grounding in pole installations, we developed robust specifications for pole grounding systems that meet or exceed DEC standards. Structural framing illustrations were provided to demonstrate our commitment to exceeding standard expectations.

Throughout the project, we adhered to key assumptions for operational efficiency, including the conformance of distribution poles to DEC guidelines and standard burial depths. The project was also based on the assumption that the distribution line would stay within the designated 60-foot easement corridor per Ballentine Associates, P.A. Our multidisciplinary approach facilitated collaboration with stakeholders, especially regarding the integration of a fiber optic network crucial to modern energy infrastructure. Close coordination with vendors ensured timely material procurement. Our team compiled and formalized the work release package to align all documentation with project requirements for execution commencement. Our engineering support services span all project phases, ensuring the successful and timely completion of the Maiden Creek Solar Farm distribution line, thereby advancing renewable energy infrastructure.

LIST OF SUBCONTRACTORS

JEA Solicitation Number 14111799247 requires certain major Subcontractors be listed on this form, unless the work will be self-performed by the Company.

The undersigned understands that failure to submit the required Subcontractor information on this form will result in bid rejection, and the Company agrees to employ the Subcontractors specified below: (Use additional sheets as necessary)

Note: This list of Subcontractors shall not be modified subsequent to bid opening, without a showing of good cause and the written consent of JEA.

Type of Work	Corporate Name of Subcontractor	Subcontractor Primary Contact Person & Telephone Number	Subcontractor's License Number (if applicable)	Percentage of Work or Dollar Amount
Geotechnical Engineering	Meskel and Associates Engineering, PLLC	Brett Harbison (905) 519 - 6990	To be provided upon award	5%
Surveying	Durden Surveying and Mapping	Bruce Durden (904) 853-6833	To be provided upon award	5%

Signed: _____



Company: Pickett and Associates, LLC

Address: 10151 Deerwood Park Boulevard, Building 100, Suite 110, Jacksonville FL 32256

Date: 8.27.24

Appendix B – Proposal Forms
1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

LIST OF JSEB SUBCONTRACTORS

The following JSEB Subcontractors will be utilized in fulfilling the terms and conditions of a Project Authorization arising from award of JEA - 1411799247. I (We) the undersigned understand that failure to submit said information will result in bid rejection. I (We) will employ the JSEB Subcontractors specified below: (Use additional sheets as necessary)

Class of Work (Category) Dollar Amount	Name of JSEB Contractor (Indicate below)	Percentage of Total Job or
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Geotechnical Engineering

Meskel and Associates
Engineering, PLLC

5%

Surveying

Durden Surveying and
Mapping

5%

Signed: 

Company: Pickett and Associates, LLC

Address: 10151 Deerwood Park Boulevard, Building 100, Suite 110, Jacksonville FL 32256

Date: 8.27.24

Note: This list shall not be modified subsequent to bid opening without a showing of good cause and the written consent of the JEA.

Pickett and Associates Response to
JEA Solicitation 1411799247
**CCNA GENERAL ENGINEERING FOR
ELECTRICAL DISTRIBUTION**



 813. 877. 7770
 www.PickettUSA.com

 TBennett@PickettUSA.com
 10151 Deerwood Park Blvd. Bldg 100, Ste. 110
Jacksonville, FL 32256



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an ESP COMPANY

August 27, 2024

Jason Behr
JEA Procurement
behrjv@jea.com

RE: JEA Solicitation 1411799247
CCNA General Engineering for Electrical Distribution

Dear Mr Behr:

Pickett and Associates is pleased to offer the enclosed proposal in response to JEA's solicitation for General Engineering for Electrical Distribution.

Pickett and Associates (Pickett) is very well positioned to perform the intended professional consulting and engineering services in support of JEA's electric distribution projects. The level of service Pickett will provide to the JEA project team is second-to-none. **We have a reputation for being asked to solve complex problems.** Our experience and capabilities are uniquely aligned to execute these specific types of projects.

We are committed to JEA's interest and trust that our proposal communicates a capability and expertise that exceeds your expectations and communicates our desire to continue to be a valued member of the JEA team. We have assembled an experienced team of professionals for this submittal to the depth and breadth of services as well as the overall strength of the collective workforce, each with a variety of specialized expertise for JEA. We have an extensive experience record with all our team members and are confident we can respond to your surveying and mapping needs.

If you have any questions or require additional information, please do not hesitate to contact me. We look forward to working with JEA and are committed to a safe and successful relationship. We appreciate your consideration in aiding your team to deliver another successful project.

Sincerely,

Tom Bennett, PE, PMP
Pickett and Associates, LLC
5010 W. Nassau St
Tampa, FL 33607
TBennett@pickettusa.com
813. 877. 7770 x101



Pickett and Associates, LLC

JEA CCNA General Engineering Services for Electric Distribution| Solicitation 1411799247



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Bid Forms



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Appendix B Proposal Form

COMPANY INFORMATION:

COMPANY NAME: Pickett and Associates, LLC
BUSINESS ADDRESS: 10151 Deerwood Park Boulevard, Building 100, Suite 110
CITY, STATE, ZIP CODE: Jacksonville, FL 32256
TELEPHONE: 813.877.7770
EMAIL OF CONTACT: tbennett@pickettusa.com

☒ I have read and understood the Sunshine Law/Public Records clauses contained within this solicitation. I understand that in the absence of a redacted copy my proposal will be disclosed to the public "as-is".

The Company shall submit one electronic copy of the signed proposal documents on the sourcing platform, prior to the Bid Due Date and Time.

Company's Certification

By submitting this Proposal, the Company certifies that the Company has read and reviewed all of the documents pertaining to this RFP and agrees to abide by the terms and conditions set forth therein, that the person signing below is an authorized representative of the Company, that the Company is legally authorized to do business in the State of Florida, and that the Company maintains in active status an appropriate license for the work.

The Company certifies, under penalty of perjury, that it holds all licenses, permits, certifications, insurances, bonds and other credentials required by law, Contract or practice to perform the Work. The Company also certifies that, upon the prospect of any change in the status of applicable licenses, permits, certifications, insurances, bonds or other credentials, the Company shall immediately notify JEA of status change.

We have received addenda 1 through 1



Signature of Authorize Officer of Firm or Agent

8.27.24

Date

Tom Bennett, PE, PMP, Vice President

Printed Name & Title

813.877.7770

Phone Number

**Appendix B Minimum Qualifications Form
GENERAL**

THE MINIMUM QUALIFICATIONS SHALL BE SUBMITTED ON THIS FORM. IN ORDER TO BE CONSIDERED A QUALIFIED PROPOSER BY JEA YOU MUST MEET THE MINIMUM QUALIFICATIONS LISTED BELOW, AND BE ABLE TO PROVIDE ALL THE SERVICES LISTED IN THIS SOLICITATION.

THE PROPOSER MUST COMPLETE THE COMPANY INFORMATION SECTION BELOW AND PROVIDE ANY OTHER INFORMATION OR REFERENCE REQUESTED. THE PROPOSER MUST ALSO PROVIDE ANY ATTACHMENTS REQUESTED WITH THIS MINIMUM QUALIFICATIONS FORM.

PLEASE SUBMIT AN ELECTRONIC COPY OF THIS FORM AND ANY REQUESTED ADDITIONAL DOCUMENTATION WITH THE BID SUBMISSION.

COMPANY INFORMATION

COMPANY NAME: Pickett and Associates, LLC

BUSINESS ADDRESS: 10151 Deerwood Park Boulevard, Building 100, Suite 110

CITY, STATE, ZIP CODE: Jacksonville, FL 32256

TELEPHONE: 813.877.7770

E-MAIL: tbenett@pickettusa.com

PRINT NAME OF AUTHORIZED REPRESENTATIVE: Tom Bennett, PE, PMP, Vice President

SIGNATURE OF AUTHORIZED REPRESENTATIVE: 

NAME AND TITLE OF AUTHORIZED REPRESENTATIVE: Tom Bennett, PE, PMP, Vice President

Respondent must meet the following Minimum Qualifications to be considered eligible to have its Response evaluated by JEA. Respondent must complete and submit the Minimum Qualification Form provided in this Solicitation. Respondents that are working or have worked for JEA in the past 2 years involving similar work must submit JEA as a reference. JEA reserves the right to ask for additional back up documentation or additional reference projects to confirm the Respondent meets the requirements stated above.

JEA may reject Responses from Respondents not meeting all of the following Minimum Qualifications:

The Proposer must have successfully completed two (2) similar overhead distribution and two (2) similar underground distribution substation projects, within the last five (5) years as of the proposal due date.

A similar overhead distribution project is defined as:

- A distribution engineering design project of a 13kV or higher overhead distribution line with an engineering contract value greater than \$100,000.

A similar underground distribution project is defined as:

- A distribution engineering design project of a 13kV or higher underground distribution line with an engineering contract value greater than \$100,000.

Any Respondent whose contract with JEA was terminated for default within the last two years shall have its Response rejected.

Project Overhead Distribution Engineering Design 1

Reference Company Name Florida Power & Light

Reference Contact Person Name Shawn Hansen, P.E.

Reference Contact Person Phone Number (561) 904-3313

Reference Contact Person E-Mail Address Shawn.Hansen@fpl.com

Date Work Began/Date Work Complete 2022 - Present

Contract Value \$467,030

Description of Project SR-70 Seville to Whidden

The project is strategically designed to improve infrastructural connectivity and reliability through the reconstruction of 7.9 miles of Florida Power & Light (FPL) distribution lines, the relocation of 29.14 miles of existing lines, and the co-location of 17.59 miles of distribution infrastructure adjacent to a 230 kV transmission line. This project aims to modernize and optimize the electrical grid to meet increasing demand while adhering to the spatial constraints imposed by the refurbishment of the transmission line.

The initiative utilized a value engineering approach for the reconstruction and relocation of distribution lines, emphasizing the co-location of infrastructure with the transmission line to enhance operational efficiencies and promote the reuse of existing poles, thereby reducing environmental and construction impacts. The project included comprehensive route evaluation, interdisciplinary coordination, design engineering, preparation of the bill of materials, procurement facilitation, and construction oversight.

Our team conducted detailed analyses, including deflection assessments and pole loading calculations, along with evaluations of existing poles to ensure compliance with client-specific standards and applicable regulatory codes. Design work included seven underground riser transfers, material take-offs, and sequencing of outages to minimize impacts. Due to the relocation of the line, voltage drop and flicker analyses were performed on transformers and secondary lines to verify sizing and implement upgrades as necessary.

Close collaboration with key stakeholders, integration of Geographic Information Systems (GIS) technology, and coordination with FPL's operational systems were essential for the effective execution of this project. By fostering strong partnerships with FPL personnel, regulatory agencies, and landowners, we ensured alignment with project objectives while meeting all regulatory requirements.

Project Overhead Distribution Engineering Design 2

Reference Company Name NextEra Energy

Reference Contact Person Name Natalie Borrelli

Reference Contact Person Phone Number 954-321-2073

Reference Contact Person E-Mail Address Natalie.Borrelli@fpl.com

Date Work Began/Date Work Complete 2018-2021

Contract Value Surveying, Engineering: \$7M, Construction: >\$500M

Description of Project North Florida Resiliency Connection (NFRC)

This project consisted of the overall engineering of a 176-mile, 161kV transmission line from Florida Power & Light's (FPL) Raven Substation in Lake City, FL to Gulf Power Sinai Cemetery Substation near Chattahoochee, FL. The project included 22-miles of distribution rebuilds, relocations, and under-build to transmission structures for six different utilities. Utilities included Florida Power and Light, Duke Energy Florida, Clay Electric Cooperative, Talquin Electric Cooperative, Suwannee Valley Electric Cooperative, and Tri-County Electric Cooperative.

Pickett was hired to perform LiDAR, surveying, real estate support, public outreach support, project management, multi-disciplined engineering, construction support and as-built activities associated with this project. Our team hired several subcontractors to support geotechnical investigations, geological investigations, SUE surveying, and electrical studies.

Project Underground Distribution Engineering Design 1

Reference Company Name Florida Power & Light
Reference Contact Person Name Luca Fasani
Reference Contact Person Phone Number 561-904-3320
Reference Contact Person E-Mail Address luca.fasani@fpl.com
Date Work Began/Date Work Complete 03/04/2022-01/02/2024
Contract Value \$100k
Description of Project Ryder-Skypass

Coordination and oversight of design and construction support activities related to the installation of a 12.5-mile underbuilt electrical distribution line, which will be positioned beneath an existing 138 kV transmission line. This project also includes the execution of eleven installations of underground riser cable transfer systems aimed at enhancing operational efficiency. The initiative necessitated a strategic relocation of an underground feeder riser pole 200 linear feet to the north, towards a pole located at the intersection of Jog Road and Beeline Highway. Furthermore, it involved the systematic transition of 1,000 linear feet of overhead feeder lines to underground infrastructure within the jurisdiction of the Florida Department of Transportation (FDOT) right-of-way at the intersection of Beeline Highway and PGA Boulevard. Our team also designed and coordinated the construction of 300 linear feet of underground secondary conduit to facilitate electrical connections to a traffic signal at the same intersection. We provided comprehensive support to FDOT and the client for outage and transfer coordination.

Additionally, we oversaw a project focused on the underground conversion of 3,500 linear feet of overhead electrical distribution lines to underground configurations adjacent to an established aquatic canal, with careful attention to environmental impact assessments. This initiative includes the installation of a switch cabinet designed to sectionalize three feeders and simultaneously supply power to a three-phase Pad Mounted Transformer (PMTX) electrical system, ensuring all operational processes are fully compliant with required permitting and authorizations from relevant county administrative bodies, the Florida Department of Transportation (FDOT), the Lake Worth Drainage District (LWDD), and applicable environmental regulations. We have initiated a permit application for subterranean construction in accordance with Palm Beach County regulations and implemented a compliance training program regarding Florida Power and Light (FPL) standards and protocols. Additionally, we have secured a permit for canal-related activities and initiated the permit application process for the jurisdictional area encompassing Haverhill Road and 45th Street. We have also prepared and submitted a Florida Department of Transportation (FDOT) permit application for construction or modifications along Bee Line Highway. Finally, we are conducting evaluations and assessments of pole boring operations to ensure compliance with structural integrity standards and specifications.

Project Underground Distribution Engineering Design 2

Reference Company Name Aubrey Silvery Enterprises

Reference Contact Person Name Kelley Pollard, PE

Reference Contact Person Phone Number 770-537-1144

Reference Contact Person E-Mail Address kpollard@silvery.com

Date Work Began/Date Work Complete April 2020 - February 2021

Contract Value \$115,621

Description of Project Maiden Solar Creek

The Maiden Creek Solar Farm project in Catawba County, North Carolina, is in the implementation phase, aimed at enhancing renewable energy infrastructure. It involves the engineering, procurement, and construction (EPC) of a 7,200-linear-foot, 34.5 kV double circuit electrical distribution line to connect the solar farm to the regional energy grid. Pickett and Associates, LLC (Pickett) was engaged for specialized engineering services to ensure compliance with Duke Energy Corporation's technical specifications.

The initial phase included a comprehensive topographic and boundary survey by a surveyor, serving as a foundation for a comprehensive design and relevant construction documentation. The engineering design process employed advanced PLS CADD software for high-precision drawings, a detailed Bill of Materials, and an extensive work package for efficient construction operations.

Engineering support services were structured for seamless integration into the regional grid, beginning with thorough reconnaissance and field surveys to establish essential geospatial coordinates. This preparation ensured accurate staking and alignment with the site's characteristics. Following the foundational work, our team advanced to engineering design, utilizing geomorphological and topographical datasets to strategically position structural components. Interdisciplinary collaboration was essential, as we worked closely with Aubrey Silvey and the solar project developer to refine design parameters for optimal structural placement. In designing the underground distribution network, we focused on creating specifications for approximately 1,000 linear feet of conduit, ensuring adherence to high engineering standards. Detailed plan and profile drawings provided precise visualizations of the structural layout.

Safety and compliance were prioritized, leading to thorough clearance assessments and obtaining the necessary NCDOT Road Crossing Utility permit for the Jack and Bore operation beneath Providence Mill Road. We incorporated revised schematics to meet trenching protocols and performed sag and tension analyses to enhance wire stringing methodologies. Recognizing the importance of grounding in pole installations, we developed robust specifications for pole grounding systems that meet or exceed DEC standards. Structural framing illustrations were provided to demonstrate our commitment to exceeding standard expectations.

Throughout the project, we adhered to key assumptions for operational efficiency, including the conformance of distribution poles to DEC guidelines and standard burial depths. The project was also based on the assumption that the distribution line would stay within the designated 60-foot easement corridor per Ballentine Associates, P.A. Our multidisciplinary approach facilitated collaboration with stakeholders, especially regarding the integration of a fiber optic network crucial to modern energy infrastructure. Close coordination with vendors ensured timely material procurement. Our team compiled and formalized the work release package to align all documentation with project requirements for execution commencement. Our engineering support services span all project phases, ensuring the successful and timely completion of the Maiden Creek Solar Farm distribution line, thereby advancing renewable energy infrastructure.

LIST OF SUBCONTRACTORS

JEA Solicitation Number 14111799247 requires certain major Subcontractors be listed on this form, unless the work will be self-performed by the Company.

The undersigned understands that failure to submit the required Subcontractor information on this form will result in bid rejection, and the Company agrees to employ the Subcontractors specified below: (Use additional sheets as necessary)

Note: This list of Subcontractors shall not be modified subsequent to bid opening, without a showing of good cause and the written consent of JEA.

Type of Work	Corporate Name of Subcontractor	Subcontractor Primary Contact Person & Telephone Number	Subcontractor's License Number (if applicable)	Percentage of Work or Dollar Amount
Geotechnical Engineering	Meskel and Associates Engineering, PLLC	Brett Harbison (905) 519 - 6990	To be provided upon award	5%
Surveying	Durden Surveying and Mapping	Bruce Durden (904) 853-6833	To be provided upon award	5%

Signed: _____



Company: Pickett and Associates, LLC

Address: 10151 Deerwood Park Boulevard, Building 100, Suite 110, Jacksonville FL 32256

Date: 8.27.24

Appendix B – Proposal Forms
1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

LIST OF JSEB SUBCONTRACTORS

The following JSEB Subcontractors will be utilized in fulfilling the terms and conditions of a Project Authorization arising from award of JEA - 1411799247. I (We) the undersigned understand that failure to submit said information will result in bid rejection. I (We) will employ the JSEB Subcontractors specified below:
(Use additional sheets as necessary)

Class of Work (Category) Dollar Amount	Name of JSEB Contractor (Indicate below)	Percentage of Total Job or
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Geotechnical Engineering

Meskel and Associates
Engineering, PLLC

5%

Surveying

Durden Surveying and
Mapping

5%

Signed: 

Company: Pickett and Associates, LLC

Address: 10151 Deerwood Park Boulevard, Building 100, Suite 110, Jacksonville FL 32256

Date: 8.27.24

Note: This list shall not be modified subsequent to bid opening without a showing of good cause and the written consent of the JEA.

Professional Staff Experience



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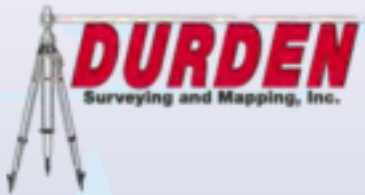


Professional Staff

Pickett's mission has always been to provide the most safe, economical, high quality and on-time engineering and project support services to its clients while becoming a trusted, flexible and reliable extension of their internal staff.



Pickett will assemble a **Core Project Delivery Team** with each series of Subject Matter Experts (SME) in design standards, practices and philosophies with responsibility for respective execution and deliverables. Pickett will perform all distribution, civil, and structural engineering; and if required, surveying, and LiDAR required for each project. The Pickett team will fully manage all engagements and workflow of our subcontractors.



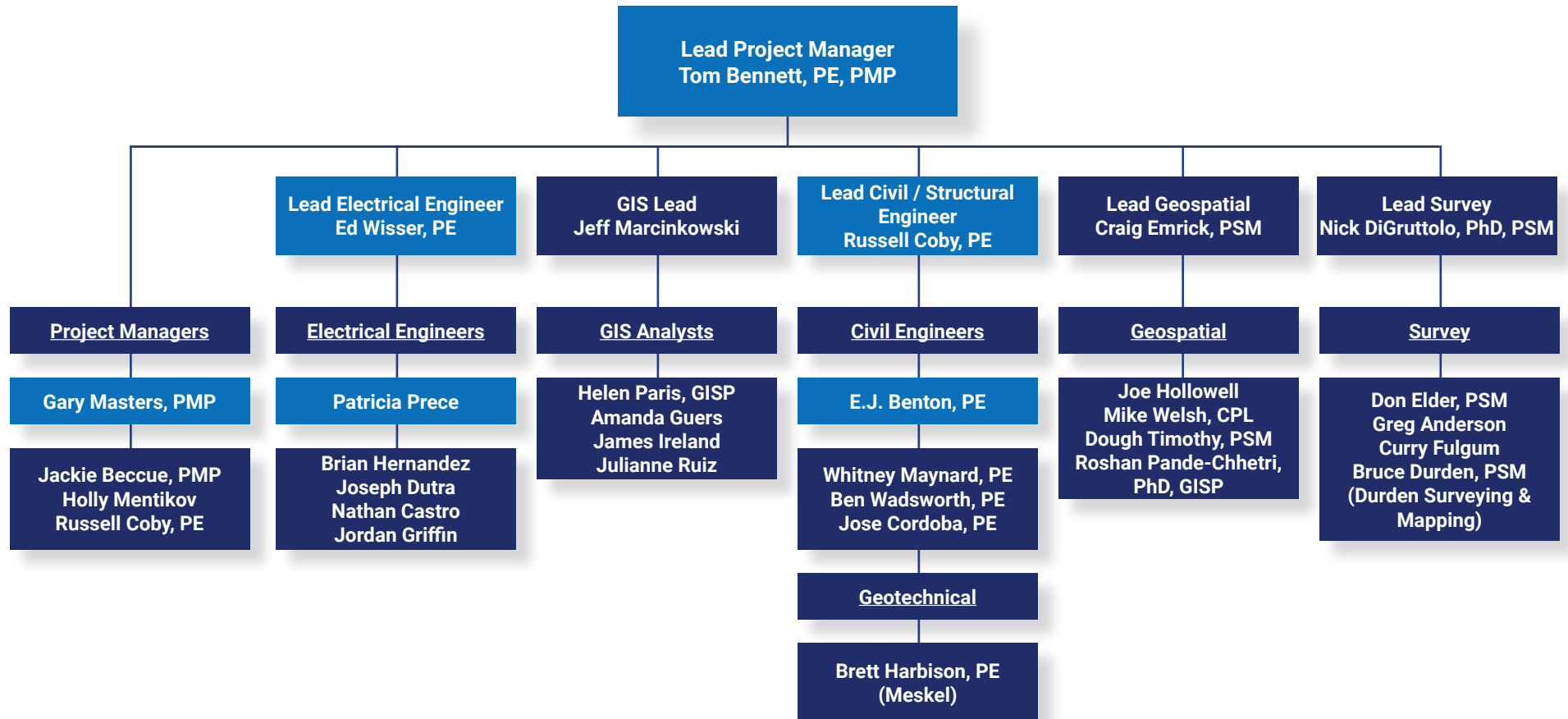
Durden Surveying and Mapping Inc is a 3rd Generation owned Land Surveying Company that has been surveying in the state of Florida since the early 1940's. They are based out of Jacksonville Beach, FL and we service the entire State of Florida, as well as various government projects. Durden is a JSEB Certified and are TWIC ready for any of your surveying needs.



Meskel & Associates Engineering (MAE) is a small business headquartered in Jacksonville, Florida. MAE provides geotechnical and environmental engineering consulting, subsurface investigations, and construction material testing and inspection services in Florida and Georgia. Primary clients include engineering firms and contractors performing work for the City of Jacksonville and surrounding municipalities, Florida Department of Transportation, JEA, Jacksonville Transportation Authority, St. Johns River Water Management District, US Army Corps of Engineers, Nassau and Clay Counties, City of Palm Coast and others.



Professional Staff



Discipline	Team Leads	Backups
Project Manager	Tom Bennett, PE, PMP	Gary Masters, PMP
Lead Electrical	Ed Wisser, PE	Patricia Prece
Lead Civil / Structural	Russell Coby, PE	E.J. Benton, PE



Years of Experience

Pickett – 11 years

Total – 25 years

Education

Bachelor of Science,
Civil Engineering,
Pennsylvania State University

Professional Registrations

Arizona PE No. 71872

Arkansas PE No. 16513

Florida PE No. 62630

Idaho PE No. P22085

Michigan PE No. 6201067001

Mississippi PE No. 26297

Missouri PE No. PE-2017018586

Nevada PE No. 022979

New York PE No. 092157-1

North Carolina PE No. 035980

Pennsylvania PE No. PE062829

South Carolina PE No. 30514

Virginia PE No. 0402051948

Wyoming PE No.18311

Professional Affiliations

Project Management
Professional, PMI ID 2007330
American Society of Civil
Engineers

Tom Bennett, PE, PMP

Project Manager

Qualifications Summary

Mr. Bennett is responsible for corporate project management and controls, engineering quality control, mentoring of junior engineers and serves as the Project Manager, Project Lead and Engineer of Record on civil, transmission, distribution, substation and telecommunications projects throughout the company. Mr. Bennett began his career in power generation designing combined cycle power plants. He served as the onsite civil/structural engineer for the construction duration of multiple power plants across the country. Mr. Bennett then transferred his civil/structural engineering experience from generation to the transmission and distribution sector of the power industry where he has excelled for the past twenty years. Mr. Bennett has held leadership and project management roles on numerous power delivery projects. His experience includes the design and evaluation of steel, concrete, lattice, marine, wood and special transmission/distribution structures; steel substation structures; structure remediation; development of design specification drawings; plan-profile drawings; permit drawings; drilled pier and marine foundation design; substation structure and equipment foundations; three-dimensional structural analysis; transmission line ratings analysis; transmission standards development; upland and wetland access road design/permitting; substation site civil design; engineering field services; construction planning; and joint-use structure analysis.

Mr. Bennett also authored and presented a technical paper titled "Permitted Permanent Access Roads & Crane Pads as a Cost-effective Alternative to Matting" at the Transmission & Substation Design & Operation Symposium (TSDOS) in Frisco, Texas in September 2019.

Mr. Bennett is a Certified Project Management Professional and is well versed in PMI project management principles and has a wealth of experience managing and designing power delivery projects.

Tom Bennett, PE, PMP
Project Manager

Project Experience

Project Client and Facility: Transmission Line Access Road Design and Improvement Projects for Jacksonville Electric Authority, Duke Energy, Florida Power & Light and Tampa Electric Company

Date of Assignments: 2013 – Present

Role on Projects: Principal Engineer and Project Manager

Brief Description of Assignments: Served as Project Manager and Civil Engineer of Record for the design and permitting of over 500 miles of access/patrol roads and crane pads within transmission and distribution easements and rights-of-way through inaccessible wetlands, unstable uplands, low water crossings and tidal crossings. Designs incorporated the use of cuts/fills, geofabric, geoweb, cable concrete, slope stabilization techniques and various types of backfill material for both at-grade road construction and above-grade (fill) road construction.

Designed culverts for above-grade roads and driveway aprons for use as flow culverts and equilibrium culverts meeting HS-20 structural loading and capacity for 100-year storm events. Oversaw the development of access road environmental permit drawings and construction drawings, prepared specifications, bid packages and construction packages, attended pre-bid and pre-construction meetings and participated in the evaluation and selection of civil contractors. Developed a stormwater pollution prevention plan (SWPPP) for each project using best management practices including silt fencing, turbidity barriers and straw wattles. Provided engineering field support answering RFI's, regular visits to the construction sites and managing red-line construction drawings. Performed field reviews of the constructed access roads to update construction access drawings for submittal to the Florida Department of Environmental Protection as part of the permit's as-built closeout process.

Project Client and Facility: Fulton Cut Crossing, Jacksonville Electric Authority

Date of Assignment: 2022 – Present

Role on Project: Principal Engineer

Brief Description of Assignment: The project scope involved the raising of six (6) 230kV transmission lines using 400ft tall towers over a major river to allow for larger cargo ships to enter the nearby port. The circuits are the backbone of the utility's transmission system and outage constraints controlled the project design and construction sequencing. Mr. Bennett was integral the evaluation of five (5) different design options to be able to achieve the increased clearances over the river and to minimize cost and outages on the circuits. All the options investigated took into consideration and compared risk, means and methods for construction, construction access, environmental impacts, real estate requirements, structure type/design, foundation type/design, wire type, FAA limitations, impacts to adjacent structures, community impacts, short-term outages, long lead times, schedules and budgets. The different options considered variations of alignments and reroutes, undergrounding of circuits, temporary installations, 900-ton ground-based cranes versus heavy lift helicopter installation, mega-structures, barges in the river for access versus substantial earthwork on land for access and many other unique and complex factors affecting each design. Extensive environmental permitting was required through FDEP, USACE, FWC, and multiple other agencies. Pickett developed a comprehensive construction access plan and construction sequencing procedure to aid in environmental permitting and construction planning. Barges, helicopters, and heavy-lift air cranes will be utilized for construction. The project also involves the distribution engineering to power the tower FAA lighting.



Total Years of Experience:

45

Pickett Classification

Principal Engineer

Education

Master of Engineering
(Electrical), Lamar University,
1985

Bachelor of Science, Electrical
Engineering, LeTourneau
University (Longview, Texas),
1979

Professional Registrations

Florida Professional Engineer
No. 41269
Texas Professional Engineer No.
117954
NCEES 18-263-68

Professional Affiliations

Institute of Electrical &
Electronics Engineers (IEEE)
Senior Life Member

Power **Engineer** **Project**
Experience

Transmission:

Project Client and Facility:
Sunbreak 230kV Transmission
Lines, FPL, Florida

Ed Wisser, PE

Lead Electrical Engineer

Qualifications Summary

Mr. Wisser spent his early career with an investor-owned utility in Texas. Since then he has provided a variety of consulting engineering services, primarily to municipal and investor-owned electric utilities. Mr. Wisser is qualified, experienced, respected and trusted, with a reputation for providing high quality services. He excels at performing project quality reviews, and is experienced as a project manager, leading teams of various sizes depending on project needs. Mr. Wisser has been a licensed professional engineer for over 35 years. His capabilities include all facets of power delivery engineering design (distribution, transmission, and substation projects), and electric utility planning studies and reports. His distribution experience includes design of overhead and underground line projects up to 34.5 kV, transmission under-build design, utility-grade solar interconnections, automatic source transfer, fuse coordination studies, and street lighting. His transmission line design experience includes overhead projects up to 500kV, transmission switch installations, underground 69kV, and NERC facility rating analysis. He is proficient in both PLS-CADD and PLS-Pole. His substation design experience includes numerous modification and addition projects for voltages up to 500kV, various bus configurations, a greenfield transmission substation (230-69kV), and two greenfield distribution substations (69-12.5kV).

Project Experience

Project Client & Facility: Various, FP&L, Florida

Date of Assignment: 2022-present

Role on Project: Project QC

Brief Description of Assignment: Coordinate pole drilling and review 13 kV and 23 kV distribution design associated with multiple transmission projects, including the Sunbreak 230 kV transmission lines (approximately 4.5 miles of over-build) and the Sweatt to Waterway 230 kV transmission line (approximately 28 miles of over-build).

Project Client & Facility: Maiden Creek Solar 34.5 kV Double-Circuit Distribution Line, Aubrey Silvey Enterprises, Duke Energy Carolinas (DEC), North Carolina

Date of Assignment: 02/2020 –09/2020

Role on Project: Underground Design Lead, Project QC

Brief Description of Assignment:

The Project provided design of approximately 1.6 miles of double-circuit express feed distribution lines, including both overhead and underground segments, to provide a 1500-amp interconnection from the Maiden Creek Solar facility to a DEC substation. The design also provided for installation of an ADSS fiber communication cable. The overhead portion typically used single pole structures except at the source end and the substation end. The underground portion included riser poles with switches and a bore-and-jack section requiring permitting under a State road. The project included developing construction specifications and a detailed Bill of Materials for Contractor procurement, using DEC standard materials where possible.

Project Client & Facility: Duke Energy Florida (DEF) Under-Build, North Florida Resiliency Connection, FP&L (NextEra), Florida

Date of Assignment: 09/2020 – 02/2021

Role on Project: UB Distribution Design Lead

Brief Description of Assignment:

The project provided design of a 7.6-mile under-build / rebuild / reconductor of a DEF 13 kV feeder along Waukeelah Highway in Jefferson County. The project involved relocating the feeder to 84 new transmission poles and replacing / installing 132 wood mid-span and lateral poles, using DEF standard materials and framings. The design was modeled using PLS-CADD to determine required pole heights and strengths. The feeder was designed using 795 AAC phase conductors a #1/0 AAAC neutral, and a future ADSS fiber, typically in a vertical configuration. The design included two crossings of Tri-County Electric Cooperative feeders, multiple transformer installations, multiple transfers of laterals and risers, and provision for switch installations and circuit recloser relocations. Design documents and make-ready work were coordinated with DEF, and included a detailed Bill of Materials for Contractor procurement.

Project Client & Facility: Co-op Under-Build, North Florida Resiliency Connection, FP&L (NextEra), Florida

Date of Assignment: 10/2020 – 05/2021

Role on Project: UB Distribution Design Lead

Brief Description of Assignment:

The project included preparing separate job packages for joint-use under-build / relocation of distribution feeders for Clay Electric Cooperative, Suwannee Valley Electric Cooperative (SVEC), Talquin Electric Cooperative, and Tri-County Electric Cooperative (TCEC). All designs were modeled using PLS-CADD to determine required pole heights and strengths.

For Clay, the project involved relocating portions of various 25 kV feeders to 69 new transmission poles and replacing / installing 72 square concrete mid-span poles, using Clay standard materials and framings for the mid-span poles. The feeders were designed using 477 (18/1) ACSR phase conductors and a #3/0 ACSR neutral, typically in a vertical configuration. The design included provision for transferring transformers, laterals, risers, and circuit reclosers.

For SVEC, the project involved relocating a portion of a 25 kV feeder to 7 new transmission poles and replacing / installing 9 wood mid-span poles, using SVEC standard materials and framings as much as possible. The feeder was designed using 336 (18/1) ACSR phase conductors and a #4/0 ACSR neutral, typically in a vertical configuration. The design included provision for transferring transformers and laterals.



Years of Experience:

Total: 20

Pickett: 5

Pickett Classification:
Manager of Engineering

Education

Bachelor of Science, Civil Engineering,
University of North Florida

Professional Registrations

Professional Licensed Engineer:

NCEES Record, 13-489-21

Florida, No.76921

Alabama, No. 52303

Kentucky, No. 38827

Professional Affiliations

Member, American Society of Civil
Engineers (ASCE)

Russell Coby, PE

Lead Civil Engineer

Qualifications Summary

Extensive experience in power delivery industry including transmission, substation, and distribution projects specializing in comprehensive engineering, analysis, and project management for new greenfield projects, rebuild and retro-fit projects, as well as expansion projects.

Management – Encompasses an array of expertise in the management of transmission and substation projects. A hands-on manager with proven ability to drive and maintain project success by implementing effective leadership. Has led teams of engineers and designers to successfully execute work products within budget, aligned with scope and on schedule. Technically competent as well as a strong team builder, skilled at inspiring confidence and leading by example to build high performance teams committed to overall objectives.

Engineering – Knowledgeable in the detailed engineering, analysis, design and construction of transmission, substation, and distribution facilities. Capable of executing projects from a planning stage through energization including detailed engineering for civil and structural disciplines, as well as coordination of electrical and substation disciplines to ensure project success. Detailed knowledge of both overhead and underground transmission and distribution systems.

Responsibilities

Responsible for planning, coordination, and the execution of Power Delivery projects, specializing in Major Projects and Programs. Responsibilities include taking a leadership role in assembling and leading engineering and design teams to execute projects ensuring clients' objectives and goals are met or exceeded on all projects; ensuring projects conform to schedule, budget, and scope and remain in compliance with quality requirements. Responsibilities include but are not limited to: engineering oversight and QC, technical writing, procurement coordination, sub-contractor and vendor coordination, client relations, permitting, and construction support.

History

- **Pickett and Associates, LLC – Manager of Engineering** 2019 - Present
 - **Worley Parsons– Principal Engineer** 2011 - 2019
 - **JEA – Project Engineer/ Project Manager** 2008 - 2011
 - **Brckett and Associates – Engineer I/ II** 2003 - 2007
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Relevant Professional Experience

Projects include, but are not limited to, the following:

Pickett Projects – Lead Engineer and/or Project Manager for the following projects:

- JEA, **NGS 416 26kV Modification**, Present. Design 4-span crossing of Nichols Creek and Northside Generation river terminal with spun concrete poles. Project includes LiDAR survey, pole and foundation analysis, clearance analysis over navigable water channel and material analysis for long span.
- JEA, **NGS 415 26kV Modification**, Present. Design 3-span crossing of Sisters Creek with new spun concrete poles. Project includes LiDAR survey, pole and foundation analysis, clearance analysis over navigable water channel and material analysis for long span.
- JEA, **North Jax 138kV Transmission Loop**, 2024 – Present. 14-mile transmission line designed with future 26kV under-build. Project includes the routing and pole spotting for future circuit.
- JEA, **CKTs 487 and 570 Modification**, 2023 – Present. As part of the Fulton Cut River Crossing relocation, 26kV distribution modifications are required to feed FAA lights on towers on either side of the river.
- JEA, **Transmission System LiDAR & Analysis**, 2022. 630-miles of transmission analysis including clearance to distribution circuits.
- NextEra, **Argyle Santa Rosa**, 2022 – Present. 28-mile transmission project including ~10-miles of 12.5kV distribution modifications for FPL and CHELCO to under-build and/or relocate existing distribution.
- NextEra, **North Florida Resiliency Connection**, 2020 – 2023. Transmission project connecting FPL to Gulf Power including 22-miles of distribution modifications for six FL utilities to under-build and/or relocate existing distribution.
- JEA **Rebuild Circuit 663**, 2020 – 2022. 6-mile 69kV transmission project with 26kV, Feeder 308, under-build distribution. The project required the analysis, transfers and relocations of 308 for new 663.

Worley Projects – Principal Engineer & Project Manager for the following projects:

- JEA, **McDuff 13kV/4kV Upgrades**, 2016. Substation transformer replacement project to replace T1 (and future T2) transformers. Project included new 4kV switchgear, interior 13kV cables from 13kV switchgear, 4kV cables from transformers to 4kV switchgear and new OH terminal structures for five outgoing overhead 4kV feeders (6301, 6302, 6303, 6305, 6308).
- JEA, **Ortega 26kV/4kV Upgrades**, 2015. Complete removal and replacement of the existing Ortega distribution substation. The station comprised to three power transformers, associated switchgear, two incoming 26kV OHDL, and four outgoing underground 4kV feeders (7201, 7202, 7203, 7204).
- JEA, **Rosselle 26kV/4kV Upgrades**, 2014. Complete removal and replacement of the existing Rosselle distribution substation. The station comprised to two power transformers, associated switchgear, two incoming 26kV OHDL, and five outgoing underground 4kV feeders (8001, 8002, 8003, 8004, 8005).
- PSE&G, **River Road 13kV SAS**, 2013. Responsible for the design of a temporary 13kV Station-Around-a-Station comprised of rigid bus on wood poles within an existing substation yard to support the replacement of the existing 13kV switchgear. Project involved design of wood structures using non-linear analysis with PLS-CADD utilizing a rigid bus design. Geotechnical evaluation and detailed pole embedment calculations were required.

JEA Projects – Project Engineer/ Project Manager for the following projects:

- Various OH and UG transmission projects including Bartram interconnect, GEC interconnect, Circuit 817 – GEC to Nocatee Conceptual Engineering, 849 relocation around Jax Heights, 934 Center Park Bypass, and 848 Rebuild HPFF Trout River Crossing, and 668 Rebuild HPFF St. Johns River Crossing.



Years of Experience

Pickett – 2 years

Total – 10 years

Education

Bachelor of Science, Psychology,
Colorado State University

Professional Registrations

Project Management

Professional: USA, #3270596

Professional Societies

Institute of Electrical and
Electronics Engineers; Power
and Energy Society and Young
Professionals

Presentations

IPSA Distribution

Core PM Competencies

Project Development

Risk Management

Budget & EVM Management

Stakeholder Engagement

Process Improvement

Team Leadership

Strategic Planning

Performance Metrics

Contract Negotiation

Gary Masters, PMP

Project Manager

Qualifications Summary

Mr. Masters is a seasoned professional specializing in proposal development, contract negotiation, team formation, scheduling, budgeting, and project quality control. He possesses deep expertise in risk management, strategic planning, and stakeholder engagement, consistently delivering projects within stipulated timelines and budgets while adhering to high-quality standards and optimizing processes. By collaborating with cross-functional teams, he creates comprehensive project documentation that define scope, schedules, and resource allocation. Employing data-driven techniques, he enhances estimating precision, increases customer confidence, and improves project margins.

Mr. Masters competencies include developing utility capital budgets, coordinating with local and federal agencies, and managing environmental permitting. He provides support to clients during city council meetings and expertly oversees contracts, budgets, subsurface investigations, and construction bidding. Furthermore, he formulates procurement specifications, conducts inspections, and manages fire mitigation and vegetation clearing efforts. Mr. Masters also handles foreign utility coordination, landowner negotiations, permitting, environmental compliance, and assessing contractor bids. He fosters strong client relationships to ensure alignment with project objectives. Mr. Masters excels in developing innovative distribution designs for urban projects, ensuring compliance with the National Electrical Safety Code (NESC) and consistently exceeding client expectations.

12- Month Portfolio & Project Management Performance:

- Portfolio Manager role supporting 38 projects (3 Project Managers) with design fees of \$10,100,815.
 - Project Manager for 5 projects with a design fee of \$3,826,739.
 - 4 projects expected to finish with significant cost savings, and the 5th on target for budget.
 - 4 projects with Subcontractor Management; ground survey, LiDAR (mobile and UAV), geotechnical exploration and testing.
 - All projects on schedule and on target for energization.
-

Relevant Project Experience

PVREA, **Larimer County Grant Initiative**, 2024-Present. The program includes nine projects focused on deploying fiber optic infrastructure for reliable internet in remote mountainous areas near Fort Collins. It involves assessing over 4,400 distribution poles and acquiring 180 miles of LiDAR data. Each pole is evaluated for structural integrity and compliance for joint-use applications. The project team develops design packages using the client's ESRI-based NISC framework with secure remote access to proprietary systems. Mr. Masters has implemented a strong communication strategy to foster coordination among stakeholders, including the client, county officials, contractors, and internal teams like design, surveying, and GIS. He created a reporting dashboard framework aligned with Poudre Valley Rural Electric Association (PVREA) requirements, especially important due to funding from Larimer County Grants. Recent wildfires necessitated a project scope reassessment, where Mr. Masters helped the team adapt and realign priorities. He ensures responsible financial management through resource allocation, precise forecasting, and value engineering. By applying Earned Value Management principles and engaging with directors and managers, he oversees key performance indicators such as Cost and Schedule Performance Indices, as well as Estimate and Budget metrics. In the next phase, Mr. Masters will lead the client through the bidding process, tailoring the approach to PVREA's preferences.

Lansing Board of Water and Light, **Hardening and Reinforcement Programs**. 2017-2022. Multiple projects to storm harden the LBWL system and roles included both lead distribution designer and project manager. Responsibilities included designing distribution facilities, executing joint-use notifications, and coordinating extensive on-site construction activities. Collaborated daily with contractors, clients, and the Construction Manager during the construction phase. Overall managed budgets, schedules, quality assurance, and timely engineering deliverables. Developed procurement documentation, conducted bid evaluations, coordinated construction contracts, and engaged in the contractor selection process. Led project resources comprising engineers, permitting specialists, and construction teams. The construction management role required six months on-site, where he coordinated planning, safety assessments, design clarifications, and processed RFIs and invoices. Reviewed contractor invoices for compliance and coordinated with the client's warehouse for equipment logistics, while conducting site inspections and confirming substantial completion.

Lansing Board of Water and Light. **Distribution Engineering Staff Augmentation**. 2018-2019. Responsibilities included conducting services such as staff augmentation and providing on-site support for clients. The primary functions encompassed project management and design for all facilities impacted by right-of-way construction and system improvement initiatives. This involved collaboration with county and city engineers on projects related to sewer, water, drainage, ADA-compliant ramps, curb modifications, and road resurfacing. Such projects necessitated the consideration of potential conflicts with overhead and underground electrical facilities, requiring designs that incorporate support for duct banks, lead cable conversions, and the relocation of both underground and overhead utilities. Additionally, coordination with clients and contractors was essential regarding scheduling, material procurement, and the construction of utility facilities. Accountable for facilitating coordination throughout the pre-design phase and continuing through to the construction phase.



Years of Experience:

With Pickett: 2 years
Total: 10 years

Pickett Classification:
Project Engineer

Education

Bachelor of Science,
Electrical Engineering,
Florida Atlantic University

Patricia Prece

Lead Electrical Engineer

Qualifications Summary

Miss Prece serves as a Distribution Project Engineer, where she is responsible for designing overhead and underground 13 kV and 23 kV distribution circuits, modifications, and system upgrades. She performs field inspections of existing distribution systems to verify equipment, system configurations, and clearances. Miss Prece has worked in multiple FPL groups such as FPL System Expansion, Distribution Underbuilt, and the Storm Secure Program working closely with FPL Project Managers and construction firms to design unique overhead and underground facilities for them. She is proficient with AutoCAD, GE Small World Design Manager, and PoleForeman. Miss. Prece graduated from Florida Atlantic University with a Bachelor of Science in Electrical Engineering and is preparing to obtain a professional engineering license.

History

- **Pickett and Associates, LLC- Project Engineer 2022-Present**
- **GAI Consultants- Distribution Engineer 2015-2022**
- **Florida Power & Light -Engineer Intern 05/2014-12/2014**

Relevant Professional Experience

Projects include, but are not limited to, the following:

Pickett Projects – Lead Engineer for the following projects:

- NextEra Energy, **Argyle- Santa Rosa**, 2022-Present. Providing complete design services necessary to transfer approximately 14 miles of Distribution for both Gulf Power and CHELCO to the new Transmission line Argyle – Santa Rosa 115 kV line. Services required preparation of a complete design, permitting support and construction support.
- Florida Power and Light, **Ryder – Skypass 230KV**, 2022-Present. Providing complete design services necessary to transfer approximately 12.2 miles of Distribution to the new Transmission line Ryder – Skypass 230 kV line. This project also included transferring 11 underground risers and converting 5000' of existing overhead Distribution to underground to maintain proper clearances. Services required preparation of a complete design, permitting support and construction support.

- Florida Power and Light, **SR 70 Seville to Whidden**, 2022-Present. Providing complete design services necessary to transfer approximately 17.59 miles of Distribution to the new Transmission line. Services required preparation of a complete design, permitting support and construction support.
- Florida Power and Light, **Germantown-Boca Teeca**, 2024-Present. Providing complete design services necessary to transfer distribution underbuilt to 30 structures along I-95. Services required preparation of a complete design, permitting support and construction support.
- Tampa Electric Company, **West Lake Drive Permitting**, 2024. Providing complete services necessary to permit 46 new distribution poles within county right of way. Services required preparation of a complete plan and profile permit package.
- Florida Power and Light, **State Road 710 Pole replacement**, 2022-2023. Providing complete design services necessary to replace 30 structures along the northeast side of SR 710 with new Distribution poles. Services required preparation of a complete design, permitting support and construction support.
- JEA, **JTA Hart Bridge**, 2022. Providing complete design services necessary to install 17,000 feet of new fiber optic cable to connect existing fiber at East Adams Street to the existing fiber optic cable at Atlantic Blvd. Services required preparation of a complete design, permitting support and construction support.
- JEA, **JTA Connection**, 2022-2023. Providing complete design services necessary to install 17,000 feet of new fiber optic cable to provide additional fibers between the JEA Southside service center and the Northbank Area. Services required preparation of a complete design, permitting support and construction support.
- Florida Power and Light, **Winkler Substation**, 2022. Providing complete design services necessary to underground 1000' of existing overhead Distribution along the east side of the new Substation. Services required preparation of a complete design, permitting support and construction support.
- NextEra Energy, **Blackwater River Interconnection Underground Fiber**, 2022. Providing complete design services necessary to install 1900 feet of new underground fiber within a transmission corridor. Services required preparation of a complete design and construction support.
- NextEra Energy, **Blackwater River Overhead Fiber**, 2022. Providing complete design services necessary to install 4200 feet of new overhead fiber within a transmission corridor. Services required preparation of a complete design and construction support.
- NextEra Energy, **Saw Palmetto Underground Fiber**, 2022. Providing complete design services necessary to install 800 feet of new underground fiber within a transmission corridor. Services required preparation of a complete design and construction support.

GAI Consultants-Distribution Engineer for the following projects

- Florida Power and Light, **UG Lateral Conversion Datura St**, 2019. Providing complete design services necessary to convert 7,700' of an underperforming single phase overhead lateral to underground. The lateral was split into 6 single phase underground loops and 1 single phase radial installing 32 pad mount transformers to improve reliability. Services required preparation of a complete design, permitting support and construction support.
- Florida Power and Light, **UG Lateral Conversion Moffett**, 2018. Providing complete design services necessary to convert 1960' of an underperforming three phase overhead lateral to underground. The lateral was converted to a three-phase loop installing 26 pad mount transformers to improve reliability. Services required preparation of a complete design, permitting support and construction support.
- Florida Power and Light, **UG Lateral Conversion Westward**, 2018. Providing complete design services necessary to convert 1850' of an underperforming single phase overhead lateral to underground. The lateral was converted to a single-phase loop installing 7 pad mount transformers to improve reliability. Services required preparation of a complete design, permitting support and construction support.



E.J. Benton, PE

Lead Civil Engineer

Years of Experience

Total – 17 years

Pickett – 12 years

Education

Bachelor of Science, Civil Engineering,
University of South Florida

Master of Business Administration,
University of Florida

Post Crisis Leadership Certificate,
University of South Florida

Professional Registrations

Florida Professional Engineer
Indiana Professional Engineer
Michigan Professional Engineer
New York Professional Engineer
North Carolina Professional Engineer
South Carolina Professional Engineer
Texas Professional Engineer
West Virginia Professional Engineer

Professional Affiliations

- American Society of Civil Engineers
- Tau Beta Pi National Engineering
Honor Society

Publications

*A Tall Order: Duke Energy's NCSPA
Project*
- ASCE Electrical Transmission and
Substation Structures, 2022
- T&D World, 2023

Qualifications Summary

Mr. Benton leads the power delivery and civil engineering teams at Pickett. He has led project teams tasked with civil and T&D engineering up to 765kV with project locations throughout North America. His engineering experience includes access road design, sediment and erosion control, civil site plans, finite element structural analysis, line ratings, design criteria development, foundation design and material specification. Mr. Benton has always placed a high priority on producing high quality deliverables that meet each client's unique requirements through implementing effective error elimination strategies and QA/QC stages and has implemented these practices with his teams.

Mr. Benton has authored a technical paper titled "A Tall Order" that was published by ASCE and presented at the 2022 ASCE SEI Electrical Transmission and Substation Structures Conference. He also authored an article on the same subject that was published in T&D World Lines and Structures Supplement.

History

- Pickett and Associates - Director of Engineering - 2016-Present
- High Power Development – Vice President – 2013-2016
- Bechtel Corporation - Civil Engineer/Technical Specialist - 2012-2013
- PowerComm Engineering - Associate Engineer - 2007-2012

Project Experience

Projects include, but are not limited to, the following:
Pickett Projects – Lead Engineer for the following projects:

Duke Energy Progress, **Liberty Substation**, 2023 – 2024. Served as the Lead Engineer responsible for the development of access plan and erosion and sedimentation to support the modification to existing 115kV substation and transmission line facilities.

Florida Power and Light, **Buttonwood Solar**, 2022 – 2023. Served as the Lead Engineer responsible for the civil access design and served as a reviewer for the transmission line design and substation tie-in. Designed access for the new 3-mile transmission line. Oversaw drainage calculations, culvert sizing, and grading plans. Reviewed foundation designs. Developed environmental permit exhibits.

Florida Power and Light, **North Florida Resiliency Connection**, 2020 – 2022. Served as the Lead Engineer responsible for the foundation design and served as a reviewer for the steel structure and PLS-CADD design model for this 176-mile 161kV project. The foundation design task included the coordinating over 450 SPT soil borings and several thousand feet of electrical resistivity imaging to evaluate karst areas. The project included over 300 drilled shaft foundations and over 1400 direct embedded structures. Also, reviewed PLS-CADD design models and steel structure designs.

Duke Energy Progress, **Cape Fear River Crossing**, 2016 – 2020. The project consisted of providing design services for raising an existing line over the Cape Fear River in Wilmington, NC to provide increased clearance for the North Carolina State Ports Authority. This project consisted of multiple vertical clearance. The middle crossarms on the existing 330' double studies to determine the most practical way to achieve the required vertical clearance. The middle crossarms on the existing 330' double circuit lattice towers over the shipping channel were replaced with longer crossarms to support the existing middle and bottom phases. Tower modelling, coordination of detailed design, fabrication oversight and test-fit of the new arms were included in the project. The new crossarms were combined with a re-conductor utilizing 3M ACCR high-temp, low-sag conductor to provide the port with the required vertical clearance. Services required preparation of PLS-CADD design and construction package, conceptual lattice tower modeling, review of final lattice tower design and shop drawings, design and construction support, preparation of supporting permit drawings, foundation analysis utilizing Ensoft GROUP and BOMs.

American Electric Power, **Amos-Kammer 765kV As-Build Model**, 2018 – 2020. Acted as Project Lead in the development of an as-build PLS-CADD model of a one hundred sixty (160) mile 765kV line. The scope included LiDAR and weather data acquisition provided by Pickett. Structure and assembly drawings were reviewed and structure models were developed, inserted into the PLS-CADD model, and adjusted to match the LiDAR data. Coordination took place with the client to determine the line loading at the time of LiDAR data acquisition. IEEE-738 standard calculations were utilized in the development of the as-surveyed wire model. The as-surveyed wire model was then used to evaluate clearances to obstacles, including vegetation, under different weather and loading conditions. The clearance results were provided in tabular form and Google Earth .KMZ format to allow foresters to target tree trimming.

Duke Energy Progress, **Asheville Plant 115kV and 230kV Transmission Support**, 2016 – 2020. Acted as the Project Lead providing complete design services necessary to build three new tie lines and the relocation and rebuild of six existing lines in support of the decommissioning of an existing coal-fired generation plant and replacement with a new combined cycle plant. Services required preparation of PLS-CADD models, design drawings, permitting support, construction packages, coordination with stakeholders, and on-site construction support. As individual lines were completed, drawings are updated based on field and office design change documentation and as-build PLS-CADD models are developed.

Duke Energy Progress, **Henderson-V.P. Kerr Dam 115kV**, 2016 – 2020. Providing design services for a 115kV transmission line shieldwire replacement project near Henderson, NC. The new line reused the existing conductor, but the old shieldwire was replaced with (1) 3/8" HS Steel OHGW and (1) AFL 0.465" OPGW. The new shieldwire was larger and heavier, prompting the modeling of existing wood h-frame structures as method 4 in PLS-CADD to ensure they could support the increased load. This involved working with an as-built PLS-CADD model with clipped cables, while maintaining the integrity of the original wire model. Services included preparation of the PLS-CADD design and construction package, design and construction support, BOMs, and as-builts.

Duke Energy Florida, **Hudson Tap – New Port Richey 115kV Rebuild**, 2014 – 2017. Served as Project Lead for the design services to rebuild a seven (7) mile 115kV line in a densely populated suburban area. Responsibilities included preparing a PLS-CADD model, developing design drawings, coordinating with vendors, supporting permitting, engaging landowners, and providing construction assistance. After construction, project closeout involved updating drawings based on design changes and creating the as-built PLS-CADD model. Previous similar projects for this client include the Deltona-Orange City 115kV Rebuild (2011-2012) and Port St. Joe-Apalachicola 115kV Rebuild (2009-2011).

Company Experience



PICKETT®
an ESP COMPANY





Company Experience

At Pickett, we are dedicated to upholding our values in all aspects of our work for our clients. Our employees consistently embody our brand promises, which include being a trusted partner, anticipating challenges, making work enjoyable, being accessible and approachable, and ensuring tasks are completed successfully. We take pride in delivering on our commitments the first time around.

Our core values at Pickett are centered around safety, exceptional service, building lasting relationships, fostering teamwork, and maintaining an engaged company culture. Safety is our top priority, as we believe that the well-being of our employees and clients is crucial to the success of our company. We are committed to promoting a safe work environment through diligent safety management, ongoing education, and training that align with industry standards and regulations. By prioritizing safety, we are able to exceed our clients' expectations and uphold a high level of performance.



The Pickett team is experienced in distribution design for electric utilities. That experience includes: standards; overhead and underground lines; new lines, relocations, and storm-hardening rebuilds; voltage conversions; recloser, switch, Tripsaver®, and fuse installations; capacitor and transformer installations; surge protection and grounding; lighting; and secondaries and services.

Below are some of our distribution line engineering service offerings:

- Standards development
- Feasibility studies, estimating and conceptual design
- Right-of-Way and easement acquisition
- New line design (Overhead/Underground)
- Wood, concrete, and ductile iron poles
- Open trench, directional drilling, duct bank, and bore-and-jack design
- Overhead to underground conversion
- Civil engineering services
- Project Management and Construction Management services
- Material and Equipment specification and vendor drawing reviews
- Siting and routing studies
- System protection & coordination
- Roadway lighting design
- Arc Flash analysis
- Loading and load flow analysis
- Foreign pole attachment management, inspection and services
- Permitting- DOT, environmental, local, railroad
- Utility-grade solar interconnections
- Power supply proposal evaluation and contracts - wholesale, solar
- Master planning- load forecasts, contingency analysis, recommended program of improvements
- Electric service policies
- Geographic Information Systems (GIS)
- Retail electric rates and tariff sheets



Reference Project 1: SR-70 Seville to Whidden

The project is strategically designed to improve infrastructural connectivity and reliability through the reconstruction of 7.9 miles of Florida Power & Light (FPL) distribution lines, the relocation of 29.14 miles of existing lines, and the co-location of 17.59 miles of distribution infrastructure adjacent to a 230 kV transmission line. This project aims to modernize and optimize the electrical grid to meet increasing demand while adhering to the spatial constraints imposed by the refurbishment of the transmission line.

The initiative utilized a value engineering approach for the reconstruction and relocation of distribution lines, emphasizing the co-location of infrastructure with the transmission line to enhance operational efficiencies and promote the reuse of existing poles, thereby reducing environmental and construction impacts. The project included comprehensive route evaluation, interdisciplinary coordination, design engineering, preparation of the bill of materials, procurement facilitation, and construction oversight.

Our team conducted detailed analyses, including deflection assessments and pole loading calculations, along with evaluations of existing poles to ensure compliance with client-specific standards and applicable regulatory codes. Design work included seven underground riser transfers, material take-offs, and sequencing of outages to minimize impacts. Due to the relocation of the line, voltage drop and flicker analyses were performed on transformers and secondary lines to verify sizing and implement upgrades as necessary.

Close collaboration with key stakeholders, integration of Geographic Information Systems (GIS) technology, and coordination with FPL's operational systems were essential for the effective execution of this project. By fostering strong partnerships with FPL personnel, regulatory agencies, and landowners, we ensured alignment with project objectives while meeting all regulatory requirements.





Company Experience

Reference Project 2: North Florida Resiliency Connection (NFRC)

This project consisted of the overall engineering of a 176-mile, 161kV transmission line from Florida Power & Light's (FPL) Raven Substation in Lake City, FL to Gulf Power Sinai Cemetery Substation near Chattahoochee, FL. **The project included 22-miles of distribution rebuilds, relocations, and under-build to transmission structures for six different utilities.**

Pickett was hired to perform LiDAR, surveying, real estate support, public outreach support, project management, multi-disciplined engineering including detailed distribution engineering, construction support and as-built activities associated with this project. Our team hired several subcontractors to support geotechnical investigations, geological investigations, SUE surveying, and electrical studies.

Project Management – The Pickett team actively and effectively managed the project through stakeholder engagement, documented action items, risk register, detailed Gantt chart schedule, and regular project status reports. Our team managed budget using project control metrics.

The Pickett team led recurring collaboration meetings throughout the project. Due to the complexity of the project, the meeting frequency varied based on the needs of the corresponding actions. These organization and timeliness of meetings were used to maintain good communication and facilitate the pursuit of action items to expedite engineering. In addition to recurring project meetings, our team led design review meetings both virtually and in-person with all stakeholders.

Siting and Alternatives Analysis – the primary line route was selected upon the start of engineering; however, there were several segments of the line route which required an alternatives analysis and ultimately needed to be re-routed. The Pickett team performed the alternatives analysis including providing concept designs, estimating, and coordination with various groups to vet the alternatives. From a distribution perspective, this included analysis to under-build or segregate transmission and distribution facilities in various combinations. Because there were several different utilities within the same space, Real Estate rights needed to be considered when laying out proposed utilities. The Pickett team supported client Real Estate teams by providing exhibits to illustrate proposed infrastructure throughout the real estate acquisition process.

Site Investigations and Permitting – The Pickett team partnered with subcontractors to perform Geotechnical Engineering and Subsurface Utility Engineering (SUE) services. Pickett also worked with NextEra teams to acquire permits and execute external contracts with other utilities.

Pickett designed FDOT and County Road crossings to maintain minimum clearances, created exhibits for each state road crossing, and developed the necessary MOT plans. With our Program Manager who is trained and certified in MOT, our team developed certified MOT plans for work within FDOT right of ways and pacing plans for major FDOT crossings.

The Pickett Field Services team performed site reconnaissance for construction access, structure spotting, and documenting existing utility infrastructure. Because some of the utilities did not have great asset information readily available, our team performed field assessments using online applications



Company Experience

Reference Project 2: North Florida Resiliency Connection (NFRC)

for real time field assessment reporting including having material inventory of field inspected poles as well as site photos uploaded to our GIS application.

Line Engineering

The project included preparing separate job packages for joint-use under-build / relocation of distribution feeders for 5 utilities, Florida Power & Light, Clay Electric Cooperative, Suwannee Valley Electric Cooperative (SVEC), Talquin Electric Cooperative, and Tri-County Electric Cooperative (TCEC). The scope of work for the Florida Power and Light portion was to transfer the 13kv distribution feeders to be underbuilt on 17 locations of the new transmission line.. The feeders were designed with 568 ACAR phase conductors with a #3/0 AAAC neutral either in the horizontal or vertical configuration. The design included provision for transferring transformers, laterals, risers, and automatic lateral switches. For Clay, the project involved relocating portions of various 25 kV feeders to 69 new transmission poles and replacing / installing 72 square concrete mid-span poles, using Clay standard materials and framings for the mid-span poles. The feeders were designed using 477 (18/1) ACSR phase conductors and a #3/0 ACSR neutral, typically in a vertical configuration. The design included provision for transferring transformers, laterals, risers, and circuit reclosers. For SVEC, the project involved relocating a portion of a 25 kV feeder to 7 new transmission poles and replacing / installing 9 wood mid-span poles, using SVEC standard materials and framings as much as possible. The feeder was designed using 336 (18/1) ACSR phase conductors and a #4/0 ACSR neutral, typically in a vertical configuration. The design included provision for transferring transformers and laterals. For Talquin, the project involved relocating portions of 25 kV feeders to 20 new transmission poles and replacing / installing 36 wood mid-span poles, using Talquin standard materials and framings as much as possible. The feeders were designed using 336 (18/1) ACSR phase and neutral conductors, typically in a vertical configuration. The design included provision for transferring transformers, laterals, and switches. Portions of the under-build design included provision for a future second circuit, and 25 additional transmission poles were designed with provision for future distribution attachment.

For TCEC, the project involved relocating portions of various 25 kV feeders to 12 new transmission poles and replacing / installing 6 square concrete and wood mid-span poles, using TCEC standard materials and framings as much as possible. The feeders were designed using 336 (18/1) ACSR phase conductors and a #4/0 ACSR neutral, typically in a vertical configuration. The design included provision for transferring transformers and laterals. Portions of the under-build design included provision for a future second circuit, and 33 additional transmission poles were designed with provision for future distribution attachment.

Design documents and make-ready work were coordinated with all of the Co-ops, and included a detailed Bill of Materials for Contractor procurement.

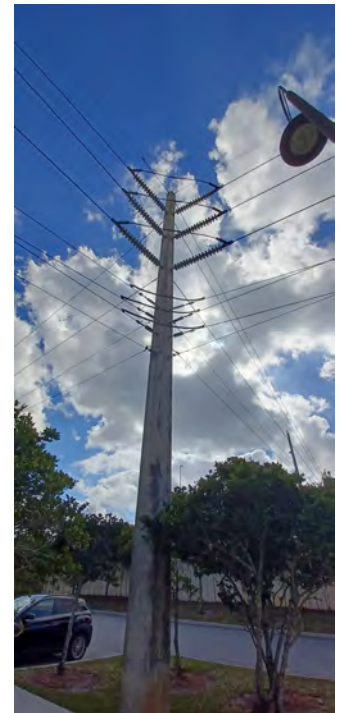


Company Experience

Reference Project 3: Ryder-Skypass

- 12.5 miles Underbuilt
- 11 UG Riser Transfers
- 3,500' of OH to UG conversion along a canal and installing a Switch cabinet to sectionalize 3 feeders and power a 3 phase PMTX -permitted with County, FDOT, LWDD and environmental.
- Relocate a UG feeder riser 200' north to a different pole on the corner of Jog Rd and Beeline Highway
- 600' of OH Feeder to UG conversion in FDOT right of way corner of Beeline Highway and PGA Blvd
- 400' of single-phase primary OH to UG Conversion in FDOT right of way corner of Beeline Highway and PGA Blvd
- Install 300' of UG secondary to feed traffic signal at the corner of Beeline Highway and PGA Blvd

Coordination and oversight of design and construction support activities related to the installation of a 12.5-mile underbuilt electrical distribution line, which will be positioned beneath an existing 138 kV transmission line. This project also includes the execution of eleven installations of underground riser cable transfer systems aimed at enhancing operational efficiency. The initiative necessitated a strategic relocation of an underground feeder riser pole 200 linear feet to the north, towards a pole located at the intersection of Jog Road and Beeline Highway. Furthermore, it involved the systematic transition of 1,000 linear feet of overhead feeder lines to underground infrastructure within the jurisdiction of the Florida Department of Transportation (FDOT) right-of-way at the intersection of Beeline Highway and PGA Boulevard. Our team also designed and coordinated the construction of 300 linear feet of underground secondary conduit to facilitate electrical connections to a traffic signal at the same intersection. We provided comprehensive support to FDOT and the client for outage and transfer coordination.



Additionally, we oversaw a project focused on the underground conversion of 3,500 linear feet of overhead electrical distribution lines to underground configurations adjacent to an established aquatic canal, with careful attention to environmental impact assessments. This initiative includes the installation of a switch cabinet designed to sectionalize three feeders and simultaneously supply power to a three-phase Pad Mounted Transformer (PMTX) electrical system, ensuring all operational processes are fully compliant with required permitting and authorizations from relevant county administrative bodies, the Florida Department of Transportation (FDOT), the Lake Worth Drainage District (LWDD), and applicable environmental regulations. We have initiated a permit application for subterranean construction in accordance with Palm Beach County regulations and implemented a compliance training program regarding Florida Power and Light (FPL) standards and protocols.



Reference Project 3: Ryder-Skypass

Additionally, we have secured a permit for canal-related activities and initiated the permit application process for the jurisdictional area encompassing Haverhill Road and 45th Street. We have also prepared and submitted a Florida Department of Transportation (FDOT) permit application for construction or modifications along Bee Line Highway. Finally, we are conducting evaluations and assessments of pole boring operations to ensure compliance with structural integrity standards and specifications.





Reference Project 4: Maiden Creek Solar



The Maiden Creek Solar Farm project in Catawba County, North Carolina, is in the implementation phase, aimed at enhancing renewable energy infrastructure. It involves the engineering, procurement, and construction (EPC) of a 7,200-linear-foot, 34.5 kV double circuit electrical distribution line to connect the solar farm to the regional energy grid. Pickett and Associates, LLC (Pickett) was engaged for specialized engineering services to ensure compliance with Duke Energy Corporation's technical specifications.

The initial phase included a comprehensive topographic and boundary survey by a surveyor, serving as a foundation for a comprehensive design and relevant construction documentation. The engineering design process employed advanced PLS CADD software for high-precision drawings, a detailed Bill of Materials, and an extensive work package for efficient construction operations.

Engineering support services were structured for seamless integration into the regional grid,

beginning with thorough reconnaissance and field surveys to establish essential geospatial coordinates. This preparation ensured accurate staking and alignment with the site's characteristics. Following the foundational work, our team advanced to engineering design, utilizing geomorphological and topographical datasets to strategically position structural components. Interdisciplinary collaboration was essential, as we worked closely with Aubrey Silvey and the solar project developer to refine design parameters for optimal structural placement. In designing the underground distribution network, we focused on creating specifications for approximately 1,000 linear feet of conduit, ensuring adherence to high engineering standards. Detailed plan and profile drawings provided precise visualizations of the structural layout.

Safety and compliance were prioritized, leading to thorough clearance assessments and obtaining the necessary NCDOT Road Crossing Utility permit for the Jack and Bore operation beneath Providence



Company Experience

Reference Project 4: Maiden Creek Solar

Mill Road. We incorporated revised schematics to meet trenching protocols and performed sag and tension analyses to enhance wire stringing methodologies. Recognizing the importance of grounding in pole installations, we developed robust specifications for pole grounding systems that meet or exceed DEC standards. Structural framing illustrations were provided to demonstrate our commitment to exceeding standard expectations.

Throughout the project, we adhered to key assumptions for operational efficiency, including the conformance of distribution poles to DEC guidelines and standard burial depths. The project was also based on the assumption that the distribution line would stay within the designated 60-foot easement corridor per Ballentine Associates, P.A. Our multidisciplinary approach facilitated collaboration with stakeholders, especially regarding the integration of a fiber optic network crucial to modern energy infrastructure. Close coordination with vendors ensured timely material procurement. Our team compiled and formalized the work release package to align all documentation with project requirements for execution commencement. Our engineering support services span all project phases, ensuring the successful and timely completion of the Maiden Creek Solar Farm distribution line, thereby advancing renewable energy infrastructure.



Additional Information



PICKETT®
an ESP COMPANY



Pickett and Associates Statement of Qualifications



PICKETT®

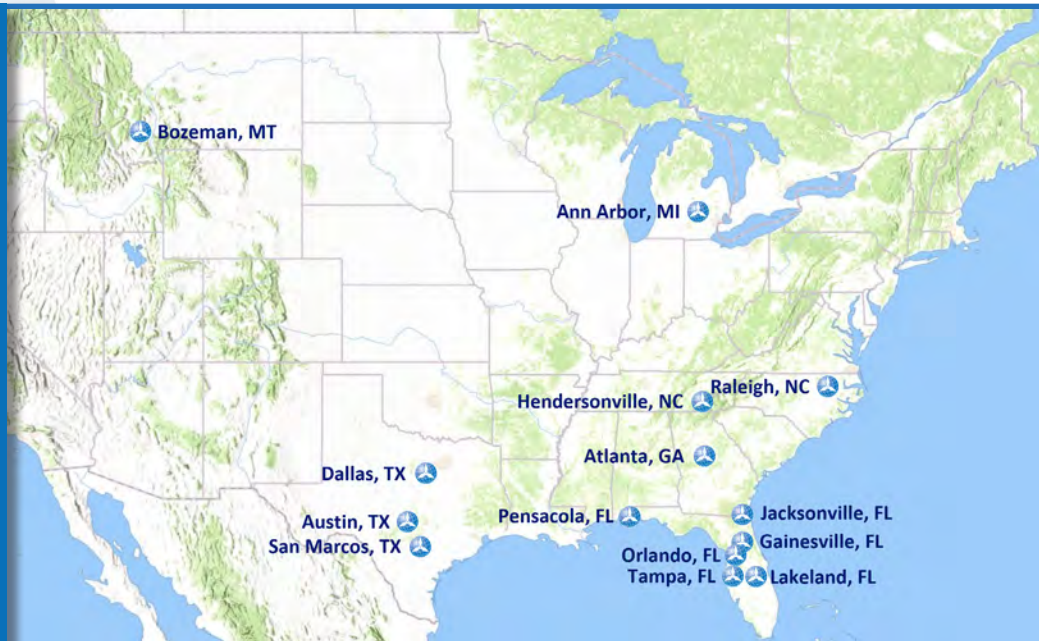
www.PickettUSA.com
813.877.7770



About Pickett

Fast Facts

- 60+ years of experience
- 14 locations
- 160+ employees
- 2 Aircraft
- 4 LiDAR sensors
- Transmission, distribution and substation design
- Surveying
- Aerial mapping
- LiDAR Services



Core Values & Brand Promises

At Pickett, our values translate into all the work that we do for our clients. As a direct result of what we value, our employees are always able to deliver our brand promises naturally; namely: ***Be a trusted partner. Anticipate challenges. Make it fun. Be accessible and approachable. Make it happen.*** We pride ourselves on delivering what we say we will do the first time we do it.

Safety First

Our philosophy is that the well-being of our company and clients is dependent on the health and safety of our workforce. We are committed to continuous improvement toward an accident-free workplace through effective safety administration, education and training in accordance with industry standards, the Occupational Health and Safety Act and all relevant regulations. This results in safe work practices and procedures that meet and exceed our client's expectations.

At Pickett, our values translate into all the work that we do for our clients.
At Pickett, we believe in:

**Safety first, Outstanding service, Lasting relationships,
Valued teamwork and an Engaged culture.**



PICKETT®

Core Competencies and Capabilities

Overview

At Pickett, We Pride Ourselves On Being Asked To Solve Complex Engineering Problems. In the last 6 years alone, our engineers have worked on over 700 projects, and developed strong and collaborative relationships with our clients, founded upon our values, brand promises and experience.

We Draw Upon Diverse Capabilities In The Power And Telecommunications Sectors. Pickett's primary clients are investor owned utilities, electric cooperatives, environmental consultants, construction companies, telecommunications companies, and power and telecom consultants.

We Excel On Projects That Test Our Skills And Imagination. Our engineers possess a varied utility and consulting background with experience encompassing transmission line and substation design, telecom structural engineering, civil/site and access road design, construction support and project management.

We Assemble A Core Project Delivery Team For Each Client. We develop a Subject Matter Expert (SME) in the client's design standards, practices and philosophies with responsibility for training all future team members. This enables our project execution teams to be scalable with the ability to perform multiple projects effectively and concurrently.

We Work Collaboratively As A Natural Extension Of Our Clients Teams. Our project delivery style and approach are to effectively communicate and work closely with our client's staff, vendors and other key stakeholders throughout all phases of the project life-cycle.

Quality Assurance And Quality Control Are Woven Into Our Project Planning And Execution. Pickett's project execution methodology integrates formal quality checkpoints and QA/QC of deliverables throughout the project life-cycle. Our QA process relies upon the use of extensive checklists, understanding of design codes and standards, and the training and experience of our engineers and designers. Our QC process employs independent design reviews in accordance with internal procedures and client specific requirements.



PICKETT®

Pickett and Associates Engineering



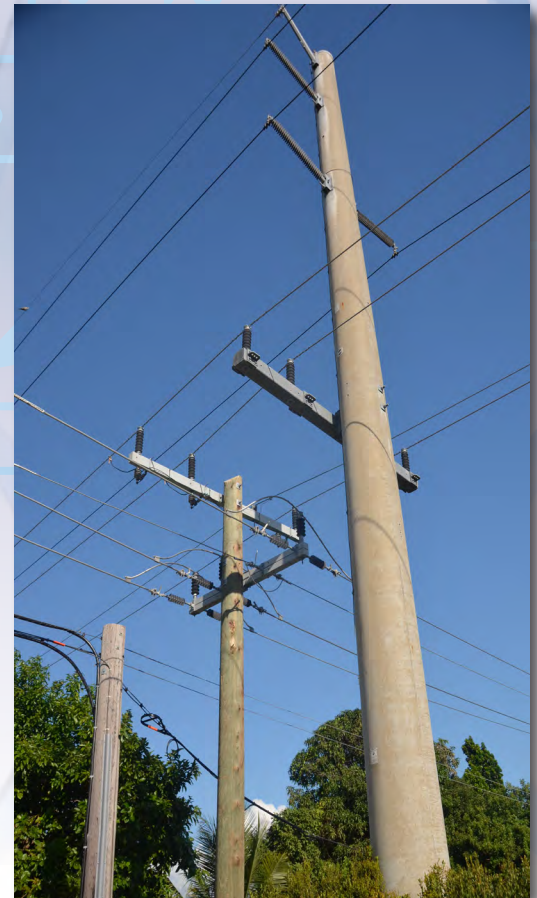
Distribution Line Engineering

Services

Highly Experienced Distribution Line Engineers. The Pickett team is experienced in distribution design for electric utilities. That experience includes: overhead and underground lines; new lines, relocations, and storm-hardening rebuilds; voltage conversions; recloser, switch, Tripsaver®, and fuse installations; capacitor and transformer installations; surge protection and grounding; lighting; and secondaries and services.

Below are some of our distribution line engineering service offerings:

- Overhead and underground distribution line design
- New builds, re-builds, relocations, high-capacity feeders, transmission under-build
- Wood, concrete, and ductile iron poles
- Open trench, directional drilling, bore-and-jack design
- Permitting- DOT, environmental, local, railroad
- Joint use coordination
- Material and construction specifications
- Shop drawing review and coordination of vendor materials
- Utility-grade solar interconnections
- Automatic source transfer
- Fuse coordination studies
- Maintenance and storm response and field engineering services
- Power supply proposal evaluation and contracts - wholesale, solar
- Master planning- load forecasts, contingency analysis, recommended program of improvements
- Cost estimating and analysis
- Retail electric rates and tariff sheets
- Electric service policies
- Geographic Information Systems (GIS)



PICKETT®

Transmission Line Engineering

Services

Engineering Roots Deeply Entrenched In Transmission Line Design.

Many of Pickett's engineers have prior experience serving in the transmission line department at an electric utility. This gives us a unique perspective and appreciation of the challenges our clients face. We design with construction and maintenance in mind, and consistently seek ways to help clients reduce capital and operating costs.

Highly Experienced Transmission Line Engineers. We have provided engineering services necessary to support hundreds of new lines, line rebuilds, overhauls, re-conductor, shieldwire replacements and substation cut-ins with new and replacement structures comprising lattice towers, and steel, concrete and wood poles. Voltages range from 69kV to 500kV across varying terrains, including mountainous areas, major water crossings, wetlands, urban centers and coastal areas.

Our Transmission Line Engineering Service Offerings Include:

- Full life cycle PLS-CADD-based transmission line design (69kV - 500kV)
- New builds, re-builds, relocations, re-rates and OPGW replacements
- Foundation design: Direct embed structures, steel reinforced concrete piers, piles and marine structures
- Structure design: engineered steel, switch structures, hybrid, etc.
- Shop drawing review and coordination of vendor materials
- Lattice steel tower analysis for telecommunications joint-use, structure remediation and major water crossings
- NERC FAC-008 compliance engineering
- Design criteria development and as-builts process definition
- EMF analysis
- Cost estimating and analysis
- Development of federal, state and local permit drawings
- Project management support services
- Maintenance and storm response and field engineering services
- Construction specification development and review
- Distribution, joint use and DOT coordination
- Clearing plans and work order package development



PICKETT®

Substation Engineering

Services

Pickett's Capabilities Include Civil and Structural Design. Our unique experience in supporting the power delivery market coupled with our engineers' expertise in civil and structural engineering allow us to provide a tailored product specific to your needs.

An Integrated Substation Project Delivery Approach. We execute substation services with an understanding and appreciation of related design disciplines, such as transmission and telecom, and develop our designs with their needs in mind. From conceptual design to as-built, our expertise covers the following range of products and services:

- Foundation design
- Equipment anchorage design
- Transformer foundations design
- Oil containment
- Control equipment enclosures
- Steel platform and utility rack design
- Firewall design
- Cable tray and pipe support design
- Shop drawing review and coordination of vendor materials
- Project management
- Construction specification review and development
- Entrance and access road design
- Station grading and drainage
- Spill control and countermeasures design



PICKETT®

Structural Engineering

Services

Advanced Structural Engineering Expertise. Pickett's team comprises engineers with extensive and broad-ranged knowledge not only in traditional analysis and design of concrete, steel and wood structures, and their associated foundations, but also in bridge and culvert design, retaining wall design and rehabilitation, and structural forensics and inspections.

Diverse Structural Analysis and Design Services. Our experience includes preparation of engineering reports, preliminary designs and calculations, and construction packages, together with provision of construction and as-built support for the following products and services:

- Analysis, design and repair/remediation of direct buried, drilled shaft, pile-supported and marine foundations for steel and concrete monopole and lattice tower structures
- Analysis, design and rehabilitation of retaining walls for substations and access roads, as well as sea walls and transformer blast walls
- Complete structural analysis, design and detailing of substation control houses, including interior steel roof beams and columns, spread footings, hollow-core roof slab, slab-on-grade, wall perimeter footing, wall openings and embedded plate design for support attachments
- Analysis and design of drainage culverts
- Design of telecom equipment support structures, including rooftop, monopole and lattice steel towers
- Design of telecom equipment enclosures, custom and prefab steel shelters, stairs, landings and associated foundations
- Design of traditional substation equipment foundations including transformers, circuit breakers, PTs, CTs, SSVTs, switches, H-frame dead-ends, bus supports and equipment pedestals
- Shop drawing review and coordination of vendor materials
- Field engineering services
- Construction specification review and development



PICKETT®

Civil Engineering / Field Services

Services

Pickett's Civil Engineering And Field Services Teams Offer Permitting, Design And Field Support Services For Numerous Types Of Transmission Right-Of-Way Access Improvements. Our engineers have designed, permitted, inspected and assisted with construction management of the installation of over 1,000 miles of access roads and right-of-way improvements through wetlands, low water crossings, tidal crossings and unstable upland areas.

Pickett's Field Services Team Assists Our Engineering Team by collecting field data; including location and condition assessment of existing culverts, monitoring and reporting of changing field conditions due to weather events, performing muck probes to estimate muck excavation volumes and serving as the liaison between engineering and construction. Pickett's field services team plays an instrumental part during the construction phase. The team is routinely making field decisions and ensuring material and construction inspection for conformance to specifications.



- At-grade access roads and right-of-way stabilizations
- Above-grade access roads with culverts
- Low water crossings and tidal crossings
- Driveway aprons off of public rights-of-way
- Temporary construction entrances
- Culvert sizing and specification
- Temporary bridges
- Crane pad design for pole installation
- Laydown yard stabilization
- Temporary matting
- Construction access plans
- Right-of-way improvement construction plans
- Stormwater pollution protection plans
- Environmental permit drawings for federal, state and local jurisdictions
- DOT, county and local permits for driveway aprons and public right-of-way improvements
- Drainage calculations
- As-built certifications



PICKETT®

Pickett and Associates Surveying



Ground Surveying & Terrestrial LiDAR

Services

The Professional Surveyors And Mappers At Pickett Have Over A Century Of Collective Experience And Are Supported By Strong Technical And Office Personnel. Our field crews, experienced in the latest techniques and survey measuring and communication technologies, deliver thorough and complete field surveys that translate smoothly into the final map product. Pickett's surveying crews have advanced terrestrial scanners and a full complement of support equipment at their disposal. Our hydrographic work is focused on inland ponds, lakes, rivers, and near shore bays and harbors. We have even developed our own Unmanned Surface Vessel (USV) for shallow and challenging hydrographic projects. Data collection and office processing is accomplished with industry standard software.



Our crews are trained and certified in multiple safety-related standards and procedures.

We Utilize A Riegl Terrestrial Scanner For Smaller Projects Where High-Resolution, High-Accuracy LiDAR Data Is Required. In combination with the top-mounted DSLR camera, we can create photo-realistic point clouds to survey and document as-built conditions of almost any feature, such as substation equipment. This technology allows us to measure objects remotely, increasing job safety, as we do not need to physically touch energized objects.

At Pickett, We Take The Safety Of Our Personnel And The Public Seriously And We Give It The Attention It Deserves. We instill a safety culture across the organization by adopting practices such as daily tailgate safety meetings and adhering to our clients' internal safety policies. Our crews are trained and certified in multiple safety-related standards and procedures. Our survey deliverables include:

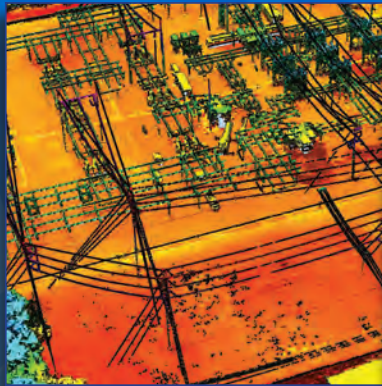
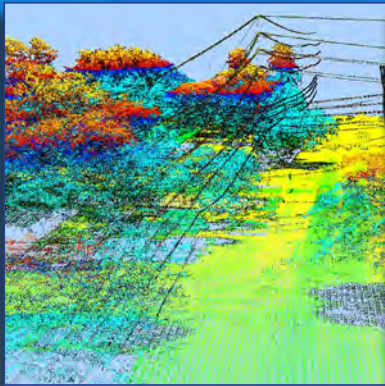
- Laser scanning
- Boundary surveys
- ALTA/ACSM surveys
- Topographic surveys
- Corridor surveys
- Hydrographic surveys
- Route surveys
- As-built surveys
- GPS control surveys
- Quantity/volume surveys
- Control surveys
- Construction staking
- Subdivision platting
- OHWL surveys
- Legal descriptions
- Expert witness testimony



PICKETT®

Pickett and Associates

Aerial Mapping



Aerial LiDAR & Digital Imaging

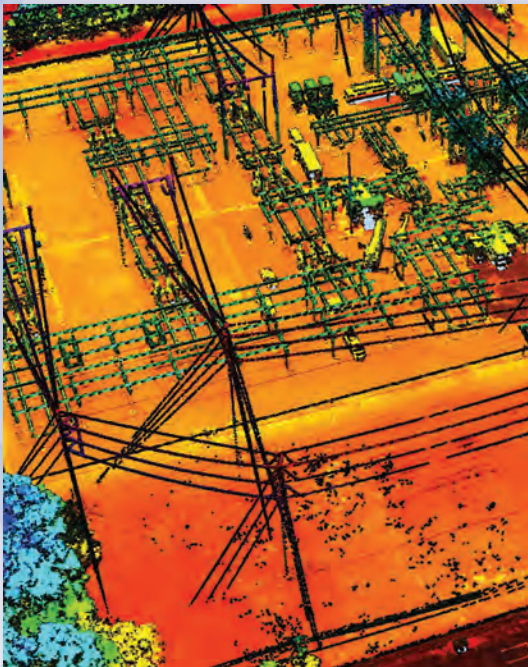
Services

We Have Extensive Experience In Acquiring, Processing, And Delivering Virtually Any Format Of Digital Imagery Or Light Detection And Ranging (Lidar) Data. As a full-service aerial acquisition, survey and data management provider, we deliver precise, reliable results. We use fixed-wing aircraft capable of collecting data for wide area, high altitude projects, and also in low altitude corridors at slower speeds. Our aerial LiDAR sensor is among the most sophisticated and technologically advanced in the world, allowing us to cost effectively produce exceptional LiDAR survey and mapping products.

Aerial Lidar Sensing Is An Efficient Method For Scanning Corridors Such As Transmission Lines Or Roadways, Or For Mapping Significant Acreage Or Many Square Miles. Our digital aerial mapping services are supported by a high-resolution digital camera system that is fully integrated with the LiDAR sensor.

Using Data Fusion, Pickett Can Merge The Results Of Ground Surveys, Multibeam Hydrographic Surveys, Aerial Lidar, And Digital Imagery Into A Complete, All-Encompassing Map. For power transmission and distribution clients, the data is packaged into the familiar PLS-CADD format, in accordance with client standards, accelerating readiness for overhead power line design. Additionally, Pickett maintains various software packages for compatibility with a wide variety of clients and business sectors. We specialize in:

- Data acquisition
- Data fusion
- Classified LiDAR data
- Digital ground surface models
 - Digital terrain models (DTM)
 - Digital elevation models (DEM)
 - Raster DEM
- Contour generation
- Topographic maps
- Volume computations
- PLS-CADD models
- Impervious surface mapping
- Orthorectified imagery
- Historical photo rectification
- Expert witness testimony



PICKETT®

UAS (Unmanned Aerial Systems)

Services

At Pickett, We View Unmanned Aerial Systems (UAS) As A Next-Generation Solution For Mapping And Inspecting Property And Infrastructure. For more than 20 years, we have been running airborne operations and building an outstanding reputation in the aerial mapping field. Pickett applied these decades of experience in aerial imaging and mapping toward our research and investment in UAS.

Pickett Has Been At The Forefront Of The UAS Industry Since 2015, And Complies With All FAA Regulations. We have since developed a system for capturing and processing imagery using Unmanned Aerial Systems (UAS) outfitted with a high-resolution digital camera. This provides additional, affordable capabilities to augment our aerial mapping services.

Our UAS Offerings Include Video Inspection, Documentation Of Utilities, Power Lines, Farmland, Site Imaging For Insurance Purposes, Or For Topographic Mapping, And/Or Volume Computations. Our UAS are specifically suited for focused or overall site video and image acquisition. Our fleet of UAS provides a safe, efficient and cost effective means to deliver professional inspection, mapping and engineering services.

- Utilities and infrastructure inspection
- Inventory documentation
- Topographic mapping
- Production planning
- Farmland management
- Material volumetrics
- GIS base mapping/imagery
- Videography
- Construction monitoring
- Data acquisition
- Edited video files
- Georeferenced imagery
- Digital ground surface models
- Contour generation
- Topographic maps
- Volume computations



PICKETT®

GIS (Geographic Information Systems)

Services

Geographic Information Systems (GIS) Offer Progressive Solutions To Meet The Demanding Needs Of Major Projects From Start To Finish. Our GIS team provides the ability to analyze large amounts of data through a geospatial component, which allows our team and clients to simultaneously visualize projects as they progress through time.

Our GIS Capabilities Include An All-Inclusive Map Portal That Serves As A Project Management Tool, Housing Several Key Project Components In One Place. This tool facilitates the sharing of geographic data between key project stakeholders, including real estate, environmental, construction, maintenance, geotechnical and field services in real-time, giving key insights to project advancement needs.

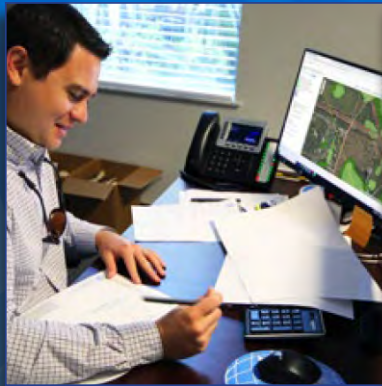
Data Can Then Be Taken From The Portal And Inserted Into Spreadsheets And Reports That Show Project Barriers, Concerns And Suggestions For Improvement. This provides complete transparency throughout the project – especially during construction – to ensure even the most difficult deadlines are met.



PICKETT®

Pickett and Associates

Additional Information and Project Samples



Project Management

PMO | QA/QC | emPowerU

Pickett's Project Management Office (PMO) evaluates each client's business goals and project objectives to implement effective and efficient portfolio, program, or project structures. We apply a customized project management methodology that is based on the Project Management Institute's principles of project management. Our PMO contains a collaborative group of certified Project Management Professionals that inject project management processes, practices, and controls for comprehensive and predictable project outcomes. This in conjunction with communicating seamlessly with Pickett's wide breadth of technical experts, provides clients and stakeholders optimized business and project success.

Adaptive and Efficient Project Management and Controls Approach: The methodology we apply to all projects provides integration of cost, schedule, and scope to allow transparent management and reporting. Pickett customizes the project management approach to individual projects to ensure efficiencies are exploited on all projects from quick projects to dynamic long-term projects.

Pickett also administers a subcontract management program that promotes consistency through a subcontract lifecycle. This lifecycle includes specific, measurable, feasible targets related to the project purpose and connected to the work breakdown structure. Pickett has a well-defined subcontractor selection process with appropriate monitoring and controlling processes.

Scope Definition: A work breakdown structure is used as a deliverable-oriented grouping of the project elements to organize, define, and confirm the scope of work. Our Project Managers decompose the project scope to develop the WBS and to confirm all deliverables required to achieve the scope provided in each notice to proceed is included.



PICKETT®

Project Management

PMO | QA/QC | emPowerU

Evaluation of Key Performance Indicators (KPIs): Earned Value Management is employed to measure the work performed against the schedule and budget expended to date. Earned Value Management applied provides estimated cost to complete and estimate at completion forecasts to incorporate into resource planning, capital spend forecasts, and calculates the performance requirements needed to produce successful completion. Pickett utilizes Earned Value Management as the primary standard for measuring project schedule and cost performance.

Program Evaluation and Review Technique (PERT): PERT is incorporated in project scheduling using Microsoft Project. This technique has the potential to reduce the time and cost required to complete complex projects. Each project schedule will contain the Gantt Chart View and state actual start and finish dates and be created and managed in a clear, concise electronic format in Microsoft Project.

Change Management Planning: Addresses any changes to project scope, schedule or budget, so all stakeholders are aware of the change and know exactly what steps to follow to alleviate and mitigate potential impacts to the project. The change management process evaluates all changes to risk, scope, schedule and budget, then presents these impacts and the changes in a change request that is submitted for approval prior to work commencing. Once approved, budget and schedule changes are incorporated into the project controls documents for management, monitoring and reporting.

Extensive Risk Management: This process includes risk identification, risk probability and impacts evaluation by completing quantitative and qualitative assessment, and then develop mitigation plans. Pickett provides continual monitoring for mitigation implementation in a timely and cost-effective manner.



PICKETT®

Quality Assurance / Quality Control

PMO | QA/QC | emPowerU

Quality Assurance

Quality assurance at Pickett starts the first day a new employee begins their career with the firm. It starts with how we on-board our employees: from administrative professionals to CAD technicians to engineers and to our leadership. We invest equally in their technical skills to deliver work products of the highest quality to industry codes and our clients standards, and in their inter-personal skills that focus on core-values and delivering our brand promises.

Quality Control

The Quality Control process requires that all project deliverables (drawings, specifications, studies, etc.) be reviewed by team members who have appropriate technical knowledge and experience. All reviews are performed by individuals not directly associated with the project team to assure an independent, objective review. Each review is detailed in nature, with the reviewer inspecting all design aspects according to internal standards (i.e. "check lists"), and the client's additional standards and requirements.

Examples of Checklists Utilized During Reviews Are:

1. Construction Document Checklist
2. Laterally Loaded Foundation Design Calculation Checklist
3. Lattice Tower Fabrication Drawing Guideline
4. Pier Foundation Drawing Checklist
5. Plan and Profile Checklist
6. PLS-CADD Design Checklist
7. PLS Pole Checklist
8. Structure Assembly Drawing Checklist
9. Structure Load and Design Drawing Checklist
10. Substation/Line Interface Checklist
11. Transmission Riser Structure Checklist
12. Tower Model Checklist
13. Tubular Steel Calculation Guideline
14. Tubular Steel Pole Fabrication Guideline

Pickett has developed procedures to effectively monitor subcontractor performance. We measure subcontractor performance by thorough review of all work completed, safety reports, on-site visits and using metrics. Metrics used to monitor subcontractor performance include productivity per unit of time, percent of on-time delivery, number of deliverables requiring revision. Also, all safety (including near- misses) and environmental issues are recorded and reviewed. As with quality, if a subcontractor is not meeting productivity requirements, Pickett will ask that the subcontractor provide a corrective action plan.



PICKETT®

emPowerU: Learning & Development

PMO | QA/QC | emPowerU

In 2019, Pickett committed to taking team member learning and professional development to a new level by establishing emPowerU. Through emPowerU, team members will have the opportunity to participate in training experiences that cover all areas of our day to day activities. emPowerU is focused on offering a blended learning experience that combines on the job training, e-coursework and coaching with feedback together to help our team members grow and advance in their career at Pickett. Current offerings through emPowerU include Project Management Training, Leadership Training, PLS-CADD Workshop Training and Client Specific Process, Procedure and Work Flow Training. Client Specific Process, Procedure and Work Flow Training focuses on teaching our team members the standards and work flows for each clients specific project execution process, ensuring we maintain the Pickett standards for quality, completeness, and efficiency for all the different clients Pickett works with.

Throughout the professional development of our engineers, we emphasize learning, understanding and application of requisite regulations, codes and standards; such as:

- National Electric Safety Codes (NESC)
- Rural Utilities Services (RUS)
- American Society of Civil Engineers (ASCE)
- American National Standards Institute (ANSI)
- Institute of Electrical and Electronics Engineers (IEEE)
- National Electrical Manufacturers Association (NEMA)
- Underwriters Laboratory (UL) UL-347, High Voltage Industrial Control Equipment
- National Electrical Code (ANSI C1) National Fire Protection Association No.70
- International Electrical Testing Association (NETA)
- American Concrete Institute (ACI)
- North American Reliability Corporation (NERC)
- Texas Engineering Practice Act and Board Rules
- Public Utility Commission Substantive Rules and Final Orders
- Applicable Texas laws
- Title 14, Code of Federal Regulations, Part 77 (14 CFR Part 77)



PICKETT®

Quality Assurance / Quality Control

PMO | QA/QC | emPowerU

Continuing Education

In addition to emPowerU, Pickett is also committed to offering continuing education through attendance and participation at many outside training programs and conferences throughout the nation. A few of the courses and conferences that Pickett regularly attends are:

- The Southeastern Electric Exchange Annual Conference (SEE)
- ASCE Electrical Transmission and Substation Structures Conference
- PLS Advanced Training and User Group (ATUG)
- Transmission and Substation Design and Operation Symposium (TSDOS)
- Design of Overhead Transmission and Distribution Lines Using PLS-CADD (Powerline Systems)
- Design of Transmission Lines, Structures, and Foundations (Univ. of WI).
- Florida Municipal Electric Association (FMEA) Energy Connections Conference & Trade Show
- FMEA Annual Conference
- Minnesota Power Systems Conference
- IEEE PES International Conference on Transmission & Distribution Construction, Operation & Live-Line Maintenance (ESMO)



PICKETT®

Who We Serve

Some of our Clients





JEA Distribution- Pickett Schedule of Rates

Classification	Classification Requirements	Years of Service in Classification	2025 Rate
Project Sponsor/Principal in Charge	MBA, BA, PE or PMP certification	15+ yrs	\$ 207.00
Director	BA, PE or PMP certification	12+ yrs	\$ 202.00
Senior Project Manager	PMP certification or minimum of ten years experience	10+ yrs	\$ 195.00
Project Manager III	PMP certification or minimum of five years experience	5-10 yrs	\$ 180.00
Project Manager II	PMP certification or minimum of two years experience	2-5 yrs	\$ 150.00
Project Manager I	Entry Level	0-2 yrs	\$ 115.00
Senior Project Controls Specialist	PMP certification or minimum of ten years experience	10+ yrs	\$ 175.00
Project Controls Specialist III	PMP certification or minimum of five years experience	5-10 yrs	\$ 155.00
Project Controls Specialist II	PMP certification or minimum of two years experience	2-5 yrs	\$ 135.00
Project Controls Specialist I	Entry Level	0-2 yrs	\$ 105.00
Administration/Account Specialist	Associates degree or minimum of four years experience	0-4 yrs	\$ 61.00
Engineering Manager/Engineer VI	ABET accredited engineering degree	15+ yrs	\$ 191.00
Engineer V	ABET accredited engineering degree	12-15 yrs	\$ 181.00
Engineer IV	ABET accredited engineering degree	8-12 yrs	\$ 162.00
Engineer III	ABET accredited engineering degree	5-8 yrs	\$ 145.00
Engineer II	ABET accredited engineering degree	2-5 yrs	\$ 133.00
Engineer I	Entry level; ABET accredited engineering degree	0-2 yrs	\$ 117.00
Engineering Specialist IV	Engineering technician degree or equivalent	12+ yrs	\$ 148.00
Engineering Specialist III	Engineering technician degree or equivalent	7-12 yrs	\$ 126.00
Engineering Specialist II	Engineering technician degree or equivalent	4-7 yrs	\$ 110.00
Engineering Specialist I	Entry level; Engineering technician degree or equivalent	0-4 yrs	\$ 99.00
Engineering Field Specialist	ABET accredited engineering degree or PE	12-15 yrs	\$ 165.00
GIS Manager	MA, BA, or PE	12-15 yrs	\$ 165.00
GIS Lead	BA or associates with minimum of ten years experience	10 yrs	\$ 133.00
GIS Analyst	BA or associates with minimum of five years experience	5-10 yrs	\$ 112.00
GIS Technicians	Entry level	0-5 yrs	\$ 94.00
Senior Designer	BA or associates with minimum of ten years experience	10+ yrs	\$ 130.00
Designer III	BA or associates with minimum of five years experience	5-10 yrs	\$ 115.00
Designer II	BA or associates with minimum of two years experience	2-5 yrs	\$ 100.00
Designer I	Entry Level	0-2 yrs	\$ 80.00
CAD/Drafter	Entry level	0-8 years	\$ 82.00

Appendix B – Proposal Forms
1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

Appendix B Proposal Form

COMPANY INFORMATION:

COMPANY NAME: Chen Moore and Associates
 BUSINESS ADDRESS: 501 Riverside Avenue, # 501
 CITY, STATE, ZIP CODE: Jacksonville, FL, 32202
 TELEPHONE: (904) 398-8636
 EMAIL OF CONTACT: pmoore@chenmoore.com

☒ I have read and understood the Sunshine Law/Public Records clauses contained within this solicitation. I understand that in the absence of a redacted copy my proposal will be disclosed to the public “as-is”.

The Company shall submit one electronic copy of the signed proposal documents on the sourcing platform, prior to the Bid Due Date and Time.

Company's Certification

By submitting this Proposal, the Company certifies that the Company has read and reviewed all of the documents pertaining to this RFP and agrees to abide by the terms and conditions set forth therein, that the person signing below is an authorized representative of the Company, that the Company is legally authorized to do business in the State of Florida, and that the Company maintains in active status an appropriate license for the work.

The Company certifies, under penalty of perjury, that it holds all licenses, permits, certifications, insurances, bonds and other credentials required by law, Contract or practice to perform the Work. The Company also certifies that, upon the prospect of any change in the status of applicable licenses, permits, certifications, insurances, bonds or other credentials, the Company shall immediately notify JEA of status change.

We have received addenda 1 through 1



 Signature of Authorize Officer of Firm or Agent

Peter Moore, P.E., F.ASCE, ENV SP, LEED AP,
 President

 Printed Name & Title

August 22, 2024

 Date

(954) 730-0707

 Phone Number

CCNA General Engineering Services For Electric Distribution Solicitation Number 1411799247



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501 Riverside Avenue, Suite 501
Jacksonville, FL 32202
Office: +1 (904) 398-8636



Letter of Interest

JEA Bid Office
Customer Center 1st Floor Room 002
21 W. Church Street
Jacksonville, FL 32202

Tuesday, August 27, 2024

Re: CCNA General Engineering Services For Electric Distribution Solicitation Number 1411799247

Dear Selection Committee,

Chen Moore and Associates, Inc. (CMA) is pleased to submit our response to JEA's RFP 1411799247 CCNA General Engineering Services for Electric Distribution. We would like to introduce you to our organization and detail for you the multi-disciplinary team of subject matter experts we have put together to serve your professional service's needs. This team is not only experienced with projects of similar nature, but they are also critical thinkers, able to address the variety of issues that can arise for projects. In 2021, CMA acquired Fred Wilson & Associates, who has provided electrical engineering services for the JEA since 2000, as well as public and private utilities throughout the State of Florida. We are confident that you will continue to find our services exceed your requirements and provide resilient and sustainable solutions for JEA.

Founded in 1986, CMA specializes in civil engineering, water and sewer, water resources, electrical, landscape architecture, transportation, planning, irrigation, environmental, and construction engineering services. The firm commits to providing responsive quality services while meeting the schedules and specific project needs of our clients. The firm is a Florida-based firm headquartered in Fort Lauderdale. CMA has offices in Orlando (Maitland), Tampa, Sarasota (Nokomis), Gainesville, Jacksonville, Jupiter, Port St. Lucie, West Palm Beach, Miami, and Atlanta. CMA embraces the history and legacy of the firm that was set by Dr. Ben Chen, P.E. and is empowered by the vision set by its leadership team, led by President Peter M. Moore, P.E., F. ASCE, FACEC. The CMA Family culture is about quality and excellence in our professional work, while contributing as a leader in our community in a fun working environment.

Technical Expertise Facilities Design

CMA has past and recent local project experience that directly correlates with the scope of work for this solicitation. We have assembled a team of highly specialized and dedicated professionals with a long track record of providing professional services for multiple municipalities. Our Team will meet or exceed JEA's needs for the proposed contract. **CMA is committing Thomas Gardner, P.E., as the primary contact and Project Manager to ensure the delivery of successful projects.** Thomas has a wide variety of professional experience that has involved leading multi-disciplinary teams to address a variety of projects for different public and private sector clients.

CMA prides itself on the accomplishments of our Electrical group and their niche services. CMA's experience with projects both small and large, and the unexpected challenges that can arise with both, enables us to offer all these services in one package. This ability, combined with our company size, enables us to provide these services to the District.

CMA has also teamed with several subconsultants to assist our team and provide the services outlined in this RFP. These subconsultants are **Structures International (SI)** for structural engineering, **Survey and Mapping (SAM)** for surveying & SUE services, **Meskel & Associates Engineer (MAE)** for geotechnical engineering, and **VIA Consulting Services** for construction engineering inspection as required.

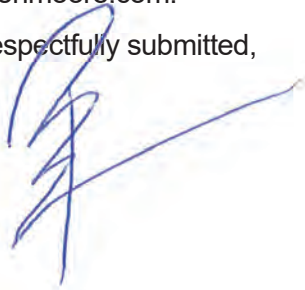
The CMA Advantage

CMA is more than just a group of ambitious professionals focused on solving infrastructure problems in Florida. Our staff works to be a part of the fabric of the community. We are leaders in community service and professional society. Our staff and our activities are centered around making the community we work in a better place to live. Our commitment to, and knowledge of, the community leads to innovative approaches, flexibility in design, and insight into our projects that the standard design firm may not possess. This is evident in our interactions with the residents, business owners, elected officials, and regulatory agencies. We look forward to bringing out technical expertise, as well as our community commitment to serve JEA.

In summary, **CMA is in the best position to deliver the required services to JEA because of our (1) institutional knowledge, (2) technical expertise, (3) high-quality management and staff, (4) capable staff able to handle the workload of this contract, and (5) commitment to the community.** Our extensive experience with engineering projects in Florida, understanding of the project and challenges that could arise, and our ability to see the full context of the project and the District's goals will ensure the projects' success.

In the following pages, please find our qualifications, team, experience, and approach. We are committed to providing the District with professional services delivered proactively on time and within budget. We have the available staff and resources needed to complete the planning, design, permitting, and construction administration for this project. We are looking forward to the opportunity to present our qualifications and approach to this LOI in more detail to the selection committee. Should you have any questions, please do not hesitate to contact me at +1 (954) 730-0707, Ext. 1002, or send me an electronic message at pmoore@chenmoore.com.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'P. Moore', with a long horizontal flourish extending to the right.

Peter Moore, P.E., F.ASCE, FACEC

Chief Executive Officer

CHEN MOORE AND ASSOCIATES, INC.

Section 1 - Professional Staff Experience

CCNA General Engineering Services For
Electric Distribution
Solicitation Number 1411799247



PROFESSIONAL STAFF EXPERIENCE

Company Introduction

Chen Moore and Associates, Inc. (CMA) has substantial experience in providing consulting for Overhead and Underground distribution engineering projects for municipals and Investor-Owned Utilities (IOU's) in the state of Florida and throughout the southeastern United States. CMA's experience, location, relationships, and commitment to JEA makes our an excellent candidate to work with JEA on this contract. CMA's project experience aligns with the Scope of Work as in the RFP 1411799247 CCNA General Engineering Services for Electric Distribution. The commits to providing responsive quality services while meeting the schedules and project needs of our clients.

Fred Wilson & Associates (FW&A) was founding in 1962 performing Civil, Roadway, and Electrical designs for Public and Private Clients. FW&A was acquired by CMA in 2021. Founded in 1986, CMA is a Florida Corporation specializing in electrical engineering, civil engineering, water resources, water and sewer, landscape architecture (LA), transportation, planning, irrigation, environmental, and construction administrative services. The has its headquarters in Fort Lauderdale, with additional in Orlando (Maitland), Tampa, Sarasota (Nokomis), Gainesville, Jacksonville, Jupiter, Port St. Lucie, West Palm Beach, Miami, and Atlanta. The commits to providing responsive quality services while meeting the schedules and project needs of our clients. CMA has successfully worked for municipalities throughout Florida for over three decades, including experience with federally grant funded projects.

All Leadership and Core Engineering Services for this Contract will be provided from our Jacksonville located at 501 Riverside Avenue, Suite 501, Jacksonville, FL 32202. Our Jacksonville is just over a mile from the new JEA Headquarters.



At CMA, we best describe ourselves, our approach, and our priorities with these words: **Leadership, Excellence, Philanthropy, Community and Culture**. CMA embraces the history and legacy of the set by Dr. Ben Chen, P.E. and is empowered by the vision set by its leadership team, led by President Peter M. Moore, P.E., F.ASCE, FACEC. The continues to grow by striving for excellence in design, innovation, project management, and quality. CMA continues to be focused on community through its commitment to philanthropy at all levels of the Every attends, contributes, and leads in community and profession-based events throughout CMA's geographic reach. The CMA Family culture is about quality and excellence in our professional work, while contributing as a leader in our communities in a fun work environment.

OUR SERVICES

ELECTRICAL ENGINEERING
CIVIL ENGINEERING
TRANSPORTATION ENGINEERING
LANDSCAPE ARCHITECTURE
PLANNING
ENVIRONMENTAL
CONSTRUCTION MANAGEMENT

OUR MARKETS

WATER & WASTEWATER
WATER RESOURCES
TRANSPORTATION
ENERGY
PARKS & RECREATION
LAND DEVELOPMENT

Organizational Chart



**Lead Project Manager/
Principal Engineer**

Thomas Gardner, P.E.



Backup Project Manager

Freeman Bass, P.E.

Key Staff

Lead Electrical Engineer

George (Chris) Gearhart, III, P.E.

Backup Electrical Engineer / Lead QA/QC

J. David Hopkins, P.E.

Support Staff

John Franko, P.E.

Daniel Diez, P.E.

Thy Doun, E.I.

Environmental Scientist

Brian Voelker M.S., SPWS, C.A., CLI

Lead Civil/Structural Engineer

John Grady, P.E.

Backup Civil/Structural Engineer

Dan Charletta, P.E.

Support Staff

Jennifer Smith, P.E.

Michael Buick, P.E.

Frank Wilson, III, P.E.

Construction Support

Derrick Smith, CFM, LEED AP

Subconsultants

Structural Engineering

Structures International, LLC

Geotechnical Engineering

Meskel & Associates Engineering, PLLC (JSEB)

Constructability Review and Inspection Support

VIA Consulting Services, Inc. (DBE/JSEB)

Survey/LiDAR/SUE

SAM Surveying and Mapping, LLC

CMA Project Leadership Team

CMA has assembled a strong team of experienced, local, knowledgeable professionals with expertise in their disciplines. The resumes for the Project Leadership Team are as follows :

Thomas Gardner, P.E.**Lead Project Manager/
Vice President****Education**

Bachelor of Science,
Electrical Engineering
System Design
Specialization, University
of North Florida, 2006

Registration

Professional Engineer,
Florida, 73027
Professional Engineer,
Georgia, 40183

Professional Affiliations

Florida Engineering
Leadership Institute,
Florida Engineering
Society,
National Society of
Professional Engineers

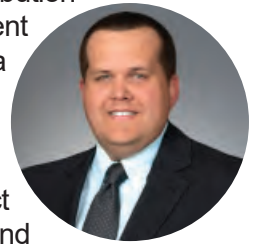
Areas of Specialization

- Transmission Engineering
- Substation Engineering
- Protection and Control
- Overhead and Underground Distribution Engineering
- Construction Phase Assistance
- Relay Settings & Commissioning
- Roadway & Site Lighting
- Substation Lighting
- Grounding Studies
- Lighting Protection Studies

Software Proficiencies

- Microstation
- AutoCAD Civil 3D
- Polywater Pull Planner
- AGi32
- Aspen
- SKM/ETA
- PPLS-CADD Suite
- CDEGS

Mr. Gardner joined CMA in 2006 and has **18 years of experience**. He has experience in substation, transmission, and distribution engineering for many electric utilities and government agencies and has served as the electrical engineer on a wide variety of power projects. As the Project Manager, Mr. Gardner will provide administrative and engineering leadership on all projects. He will determine personnel assignments, oversee quality control procedures, conduct financial negotiations, manage schedule performance, and oversee subconsultant work.



- **JaxPort Substation** – Substation Engineer for a new 26/13kV substation. The station included two power transformers and two outgoing feeders to serve the new 13kV cranes at JaxPort.
- **26.4kV Overhead Distribution Relocation on SR-10/Atlantic Blvd. (Kings Ave. to University Blvd.)** – Contributed substantial design for overhead distribution relocation to accommodate roadway improvements.
- **26.4kV Overhead Distribution Relocation on Touchton Rd.** – Designed overhead distribution relocation and lighting upgrades to accommodate roadway improvements.
- **MCLB Warehouse Transformer Replacements Phase 1** – This project was a design build project with A. West Enterprise. The scope of this project consisted of replacing unit substations and associated conduit, conductors, and panel boards within 12 warehouses. A pad-mount transformer and switchboards were also installed at each location within the required outage duration. This project was completed with minimal disruption to the operations of the warehousing needs of MCLB Albany.
- **MCLB Warehouse Transformer Replacements Phase 1I** – This project was a design build project with A. West Enterprise. The scope of this project consisted of replacing unit substations and associated conduit, conductors, and panel boards within 8 warehouses. A pad-mount transformer and switchboards were also installed at each location within the required outage duration. This project was completed with minimal disruption to the operations of the warehousing needs of MCLB Albany.
- **Florida A&M University** – Campus Wide Infrastructure Upgrades – Contributed substantial design for campus-wide 12.47kV distribution upgrades from 4.16kV. Multi-phase project with construction support for over five years. The total construction cost for all three phases is \$20 million. Design included converting all overhead distribution to underground, duct bank, MV switchgear, site lighting and fiber network for smart grid metering.
- **Kennedy Space Center** – Replacement of 15kV Underground Feeder Cable and Ducts in Launch Complex 39. Contributed design to medium-voltage underground cable and equipment project.
- **Clemson Distribution System Master Plan:** Project Manager for the independent evaluation of Clemson University electric utility system, master plan, and PowerPoint presentation for Board of Trustees
- **Athletic Area Electrical Planning** – Engineer for the stadium project included renovations to incorporate additional transformers needed for the stadium suites upgrade renovation.
- **Herschel Substation** – Substation Engineer for replacing the existing station with a new 26/4kV substation.

SECTION 1: PROFESSIONAL STAFF EXPERIENCE

- **Mayo Substation** – Project Manager for new 138/26kV greenfield substation.
- **Dinsmore Substation** – Project Manager for new 230kV-26kV greenfield substation.
- **Sampson to Millcreek Line Relay Replacement** – Engineer for the replacement of the Primary and Backup Line Relaying at Sampson Substation. This included coordinating the engineering design with FPL, creating design drawings, relay settings and providing on-site commissioning assistance to verify equipment installation.
- **Sampson Line 805 Relay Replacement** – Engineer for the replacement of the Primary and Backup Line Relaying at Sampson Substation. This project is part of the overall Guana Expansion. This project includes creating the design drawings and relay settings.
- **Transmission Coordination Study** – Engineer for the overall Beaches Energy Transmission Coordination Study. The study included verifying existing relay settings for every transmission line on BES's system and providing recommended changes to update the protection schemes.
- **Butler Line 803 Relay Replacement** - Engineer for the replacement of the Primary and Backup Line Relaying at Butler Substation. This included creating the design drawings and relay settings.

Transmission Engineering Experience (Project Manager):**JEA:**

- **230kV Transmission Overhead Line Study in Association with the Mayo Clinic Substation** – Completed a transmission route study for a 230kV transmission line between San Pablo and Center Park substations as well a new 230kV corridor from Greenland Energy Center

FPL:

- **SR-20 Transmission Relocation** – Relocate approximately 6.5 miles of 138kV transmission line including a two-way transmission switch for the expansion of SR-20
- **Delta – Glenn 115kV** – EMF calculations new 3.4-mile double circuit 138kV transmission line. Coordinated with the existing substation tap and new substation tap for conductor attachment locations for model.
- **Multiple Maintenance Replacement Projects on 230kV, 138kV, and 115kV Transmission lines**
- **US-301 Transmission Relocation** – Relocate 1 mile of 138kV transmission line and underbuilt distribution facilities to accommodate the Starke bypass
- **SR-46 Transmission Relocation** – Relocate approximately 5 miles of 138kV transmission line and underbuilt distribution facilities for the expansion of SR-52.
- **SR-223 Transmission Relocation** – Relocate approximately 1 mile of 138kV transmission line for a new bridge.
- **Columbia-Tustenugee 115kV Ampacity Upgrade** - Evaluated the existing 115kV transmission line and replaced numerous structures to alleviate NESC clearance violations that would be present for the line to have a higher ampacity rating.
- **St Johns River Crossing** – Replaced 8 existing wood poles with new spun concrete poles embedded in steel casings crossing the St Johns Rive along SR-46.

Beaches Energy Services:

- **115kV Transmission Relocation at Guana Substation** - Six pole relocation for the expansion of Guana Substation.
- **115kV 801 Line Kings Road Transmission Relocation** – Four pole relocation for the expansion of a bridge.
- **804-1 Clearance Remediation at Sampson Substation** – Replacement of substation pull off structure to alleviate a clearance violation to the existing substation bus structures.
- **Fort Diego 138kV By-Pass Transmission Switch** – New two way 138kV switch to bypass substation.
- Impedance calculations for the entire 138kV system

Utilities Commission of New Smyrna Beach

- **138kV Transmission Relocation at Smyrna Substation** – 6 pole relocation for the expansion at Smyrna Substation
- **Three way Transmission Tie Switch Installation** – Replaced four existing wood pole with new spun

Freeman Bass, P.E.**Back Up Project Manager****Education**

Bachelor of Science,
Electrical Engineering,
University of Florida, 2014

Registration

Professional Engineer,
Florida, 87828
Georgia, 50989
North Carolina, 056949
Michigan, 6201312915

Professional Affiliations

- Florida Engineering Society
- Institute of Electrical and Electronics Engineers
- Society of Military Engineers

Areas of Specialization

- Overhead and Underground Transmission Design
- Overhead and Underground Distribution Design

Software Proficiencies

- Synergi
- SKM
- AmpCalc
- Polywater Pull Planner
- Aspen OneLiner
- Aspen LineDB
- acSEerator QuickSet

Mr. Bass serves as the Director of Energy for CMA's engineering team and will be the Backup Project Manager for this contract. Mr. Bass joined CMA in 2015 and has **9 years of experience**. Mr. Bass has experience working on various aspects of electrical engineering design, plan preparation, permitting and construction oversight while working in a project team environment. His experience includes overhead and underground Transmission design; overhead and underground Distribution design; transmission and distribution modeling and simulation; lighting design; substation physical layout; and protection & control wiring. He also prepares estimate of probable cost including quantity takeoffs.

**Project Experience*****Distribution Engineering Experience:*****Reedy Creek Energy Services**

- **Fort Wilderness Live Front to Dead Front Switch Replacement** – Engineer of Record for project that replaced fourteen live-front pad mount switchgear with dead-front switchgear and reconfigured circuits to allow for greater operational flexibility.
- **Switch Station 60 Removal** – Engineer of record to remove existing switch station consisting of 20 HPL switches. Reconfigured underground circuits and replaced live-front pad mount switches with dead-front live front switches throughout the Wastewater Treatment Plant.
- **Live Front-Dead Front Phase 2**-Engineer of Record to replace fourteen existing live front switches with dead front switches.
- **Project 89-** Engineer of Record for project to install new cables, duct system, transformers, and fiber optic cable for new resort. Design included SCADA panels for transformer monitoring. (Project Not Constructed)
- **Project 89 Early Works-** Designer for project to reconstruct the feeders and relocate equipment entering Fort Wilderness for relocation of existing buildings and opening space for new construction.
- **Project MK2** – Designer for new 15kV infrastructure for service to new buildings and facilities, consisting of one pad mount switch gear, two pad mount transformers, 300kVA and 750kVA, two 2750 kVA specialty transformers and 15kV duct and cable. New fiber and SCADA monitoring system.
- **Italian Job** – Designer for new service to buildings, consisting of four 15kV pad mount switch gear, ten 300-1500kVA pad mount transformers, and 15kV cable. New fiber and SCADA monitoring system designed.
- **Project 88-2** – Designer for new service to a new building, consisting of three 15kV pad mount switch gear, four 1000-2500kVA pad mount transformers, and 15kV cable. New fiber and SCADA monitoring system designed.
- **Center Drive Electrical Relocation** – Designer for road relocation project consisting of two underground circuits, switchgear, and pad mount transformer for road relocation project.
- **World Drive Electrical Relocation Ph. 1** – Designer for the relocation of six underground 15kV circuits, two underground 69kV circuits, concrete encased ductbank, manholes, and switchgear. Design included replacement of existing service rack to building.

SECTION 1: PROFESSIONAL STAFF EXPERIENCE

- **Osceola Parkway Electrical Relocation** – Designer for the relocation of twelve underground 15kV circuits, two underground 69kV circuits, manholes, and switchgear for a road relocation project.
- **Carousel of Progress Substation Replacement**- Designer for the replacement of 4 existing HPL metal clad switch gear and station class transformers with pad mount transformers. Designed new SCADA monitoring cabinet.
- **U406 Replacement** – Designer for the replacement of existing station class transformer with new pad mount transformer. Temporary power provisions to allow building to remain in service while transformer was being replaced.

City of Bartow

- **Northern Connector Overhead Tie** – Designer for new 2.6 mile overhead and underground distribution feeder tie
- **Mineral Development Distribution Upgrade**- Engineer of Record to replaced 2.1 miles of overhead single circuit distribution with a new double circuit distribution line. New fiber optic cable was installed for metering.

Utilities Commission of New Smyrna Beach

- **Smyrna Express Feeders** – Engineer of Record for new underground and overhead express distribution feeders from Smyrna Substation to distribution ties. Approximately 2400 LF of underground cable and 2700' of overhead.

Florida Power and Light

- Multiple overhead AFS Switch Replacement Projects
- Multiple transmission under build replacement projects

Georgia-Pacific

- **GP Palatka Overhead Feeder** – Designer for 1.3-mile overhead service from existing FPL substation to new manufacturing facility. Design included feeder entrance into building switchgear.

University of Florida

- **Substation #6 Bus Duct Replacement** – Engineer of record to replace 15kV Bus Duct between existing substation transformer and switchgear.

Select Transmission Engineering Experience:**Jacksonville Electric Authority (JEA)**

- **69kV Herlong Transmission Underground Replacement** – Replaced duct/manhole and cable system for 69kV system cable that was failing.
- **Transmission Line Geometry Modelling** – Modified 34 PLS CADD models to update attachment heights and points to match survey points

Florida Power & Light

- **Delta – Glenn 115kV** – Designed a new 3.4-mile double circuit 138kV transmission line. Modified the existing substation transmission configuration and coordinated the terminations at the new Glenn Substation.
- **SR-20 Transmission Relocation** –
- **US-301 Transmission Relocation** – Relocate 1 mile of 138kV transmission line and underbuilt distribution facilities
- **SR-46 Transmission Relocation** – Relocate approximately 5 miles of 138kV transmission line and underbuilt distribution facilities
- **SR-223 Transmission Relocation** – Relocate approximately 1 mile of 138kV transmission line
- **Multiple Maintenance Replacement and LiDAR Remediation Projects**

Beaches Energy Services

- 115kV Transmission Relocation at Guana Substation

**George (Chris) Gearhart,
III, .P.E.****Lead Transmission
Engineer****Education**

Bachelor of Science, Electrical
Engineering, University of
Florida, 2001

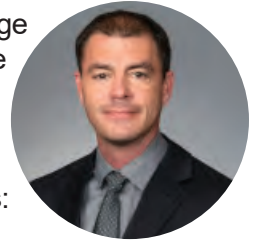
Registration

Professional Engineer, Florida,
72823,
Alabama, 31613
Colorado, 45663
Minnesota, 52385
Wyoming, 13634
Utah, 8159191-2202

Software Proficiencies:

- PLS Cadd
- PLS Pole
- Caisson
- AutoCAD
- Microstation

Mr. Gearhart has over **20 years of experience** in the electric utility industry, specializing in transmission and distribution line design. He has performed engineering and design on high-voltage transmission lines up to 345 kV in projects throughout the United States. His expertise includes project design and engineering, permitting support, specifications, material take off and procurement, shop drawing reviews, bid reviews, and construction support. His project work includes:

***Distribution Engineering:*****San Diego Gas & Electric – San Diego, California**

FIRM (Fire Hardening and Remediation): Rebuilding all distribution circuits on the SDG&E system utilizing PLS CADD

Climax Mine – Climax, Colorado

25kV Overhead line from Barge Substation to Mayflower Substation

25kV Overhead Line from Mayflower Substation to Property Water Discharge Treatment Plant

5kV Overhead Double Circuit Line from Barge Substation to Barges

JACKSONVILLE ELECTRIC – Jacksonville, Florida

Rampart Road Electric Distribution Relocation

Shindler Drive Electric Distribution Relocation from Argyle to 103rd

Touchton Rd Electric Relocation OH to UG

St. Johns Bluff Rd. Overhead to Underground Distribution Relocation

Beaver Street – McDuff to Stockton Electrical Relocation and Voltage Upgrade from 4kV to 26kV

Wonderwood Connector – OH to OH Distribution Relocation

St. Johns Bluff Overhead Relocation

KENNEDY SPACE CENTER – Cape Canaveral, Florida

Replace Feeders 606 and 612 to Pad B (15kV UG)

Generating design criteria for projects governed by National Electrical Safety Code (NESC), General Order 95 (GO-95), and Rural Utilities Service (RUS).

Managing and controlling costs for distribution and transmission relocation projects for government agencies and private companies.

Designing multiple new and upgraded transmission lines at voltages from 46 kV to 230 kV for JEA, Lakeland Electric, Ocala Electric, Georgia Transmission Company, Black Hills Energy, Climax Mining Company, and the Department of Defense. Developed multiple permit documents, including those for CSX Railroad, Department of Transportation (DOT), counties, and the Federal Aviation Administration (FAA).

Transmission Engineering:

Southwestern Power Administration Transmission Line Design – Oklahoma and Arkansas

Performed High Temp/Low Sag Conductor Study and Replacement on Existing Steel Lattice Towers from Str. 87 to Dardanelle

Designed 20 miles of 138 kV on Steel H-Frame Structures from Allen to Tupelo

Designed 40 miles of 161 kV transmission Line on Steel H-Frame Structures from Sallisaw to Van Buren

Black Hills Energy Transmission Line Design – Cheyenne, Wyoming

Designed 2.5 mile 115kV Transmission Line Substation Tie-In

BLACK HILLS ENERGY TRANSMISSION LINE DESIGN – Pueblo, Colorado

Designed 21 mile 115kV Transmission Line from Pueblo Substation to West Station

PACIFICORP Energy Transmission Line Design – Vineyard, Utah

Designed 345kV Transmission Line Interconnect from Lake Side 2 Substation to Steel Mill Substation

JEA Transmission Line Design – Jacksonville, Florida.

Lead Transmission Design Engineer or Transmission Design Engineer for Several Overhead 69kV-230kV Transmission Lines on Spun Concrete and Steel Poles with Underbuilt Distribution. Projects included:

Duval to Jax Heights 230kV Circuit 954 Addition: Install New 230kV Transmission Line (11 mi.). Upgraded Circuit 644 to 230kV (renamed Ckt 857) on Main St. from Ritter Park to Anheuser Busch Substations.

Upgraded Circuit 678 to 138kV on Talleyrand Ave. from Georgia St. to Dillon Substations.

Upgrade Circuits 853/854 to 230kV at Beazer Homes.

Relocated 230kV Transmission Line (Ckt 944) on Brannan Field Rd.

Relocated 69kV Transmission Line (Ckt 679) at Ellis Rd. and South Alpha Ave.

Upgraded and Relocated 69kV Transmission Line (Ckt 660) from Grand Park to West Jax. Substations.

Relocated 69kV Transmission Line (Ckt 631) on Rampart Rd. from Park City Dr. to Collins Rd.

Relocated 69kV Transmission Line (Ckt 663) for Morse Landing Development.

Relocated 69kV Transmission Line (Ckt 663) for Wal-Mart.

Georgia Transmission Corporation Transmission Line Design

Installed New 230kV Transmission Tap to East Berlin Substation.

Installed New 46kV Transmission Line from East Berlin to Berlin Substation.

Ocala Electric – Ocala, Florida

Dearmin to Baseline (69kV) Line design

Sharpes Ferry Bridge (69kV) Relocation

Lakeland Electric – Lakeland, Florida

Design 69kV Transmission Line with under-build distribution from Orangedale to Socrum

Study 69kV Indian Lakes Substation to Socrum Substation

Study 69kV Dranefield Substation to Hamilton Substation

Beaches Energy – Jacksonville Beach, Florida

Penman Road Overhead (138KV) Line with UB Distribution

**John David Hopkins,
P.E.****Principal Engineer/
Quality Control &
Quality Assurance****Education**

Bachelor of Technology,
Construction, University of
North Florida, 1979

Registration

Professional Engineer,
Florida, 60945

Professional Affiliations

Florida Engineering
Society
Institute of Electrical and
Electronics Engineers
(IEEE)
National Society of
Professional Engineers
Power Engineering Society
of IEEE

Areas of Specialization

- Transmission Design
- Substation Design
- Relay Engineering
& Protective Device
Coordination
- Distribution Design
- Industrial Electric
Design

Mr. Hopkins joined CMA in 1982 and has over **49 total years of electrical engineering experience**. He brings value through the breadth and depth of his electric utility engineering experience and leadership, and he has extensive experience with all facets of Transmission & Distribution (T&D) engineering, including system studies, distribution, transmission, substation, and relaying projects. He also has substantial fiber-optic engineering experience. Mr. Hopkins managed projects successfully for more than 30 years. His experience makes him effective in anticipating obstacles on the front end of projects. Mr. Hopkins began his career working on distribution lines on a JEA Line crew, and has maintained a practical, down-to-earth approach.

**Project Experience (Project Manager / Engineer of Record or Lead Engineer)****JEA**

Design engineer and Team Leader for numerous Distribution, Transmission, and Substation projects for JEA since 2000.

- Rampart Road Electric Distribution Relocation
- Shindler Drive Electric Distribution Relocation from Argyle to 103rd Touchton Rd Electric Relocation OH to UG
- St. Johns Bluff Rd. Overhead to Underground Distribution Relocation
- Beaver Street – McDuff to Stockton Electrical Relocation and Voltage Upgrade from 4kV to 26kV
- Wonderwood Connector – OH to OH Distribution Relocation
St. Johns Bluff Overhead Relocation

Reedy Creek Energy Services

Design engineer and Team Leader for numerous Transmission, Substation, Distribution, Low Voltage Industrial, and fiber optic projects for Reedy Creek Energy Services since 1991. Project scopes consisted of the distribution design for three Theme Parks, upgrade of underground duct bank and cable systems, medium & low voltage switchgear, pad mounted equipment, motor control centers, and panelboards. Completed arc flash and system studies.

- **Project 89 Early Works** - 15kV design of Off-Site infrastructure to serve Project 89.
- **Italian Job** – Design 15kV distribution for new service to buildings, consisting of four pad mount switch gear, ten 300-1500kVA pad mount transformers, and 15kV cable. New fiber and SCADA monitoring system designed.
- **Project 88-2** – Design for new service to new building and facilities, consisting of three 15kV pad mount switch gear, four 1000-2500kVA pad mount transformers, and 15kV cable. New fiber and SCADA monitoring system designed.
- **Project MK2** – Design for new 15kV infrastructure for service to new buildings and facilities, consisting of one pad mount switch gear, two pad mount transformers, 300kVA and 750kVA, two 2750 kVA specialty transformers and 15kV duct and cable. New fiber and SCADA monitoring system.
- **Center Drive Electrical Relocation** – Design for road relocation project consisting of two underground circuits, switchgear, and pad mount

transformer for road relocation project.

- **World Drive Electrical Relocation Ph. 1** – Design for the relocation of two 69kV transmission circuits, six underground 15kV circuits (11,000 LF), concrete encased duct bank, manholes, and switchgear. Design included replacement of existing service rack to building.
- **Osceola Parkway Electrical Relocation** – Design for the relocation two 69kV transmission circuits, twelve underground circuits, manholes, and switchgear for a road relocation project.
- **Carousel of Progress Substation Replacement**- Design for the replacement of 4 existing HPL metal clad switch gear and station class transformers with pad mount transformers. Designed new SCADA monitoring cabinet.
- **U406 Replacement** – Design for the replacement of existing station class transformer with new pad mount transformer. Temporary power provisions to allow building to remain in service while transformer was being replaced.
- **Replace North Service Area (NSA) Central Energy Plant (CEP) MCC-3B** – Design for the replacement of a 5kV motor control center, all associated controls, and relay settings. Replace 5kV feeders to existing motors.
- **NSA CEP 5kV Compressor Feeder Modifications** – Design to reconfigure 5kV feeders from different busses from the 5kV switchgear.
- **NSA CEP 5kV – 125V DC System Modifications** – Design to reconfigure the existing 125V DC for redundant feeds so each 5kV buss had an individual feed from a 125v DC distribution panel.
- **Magic Kingdom Tunnel RTU Replacement** – Design for the replacement of obsolete RTU's and associated equipment with new devices at eight (8) substations.

NASA/KSC

- **Repair KSC Low Voltage Switchgear at the Press Site and Upgrade Press Site Generator Controls, NASA/KSC.** Project Manager for project to replace 480V switchgear and upgrade controls for LC-39 Press Site with equipment sized for 1500 kVA utility transformer and two 500 KW generators.
- **Revitalize Electrical Distribution System, Bldg. 836, VLS, NASA/Vandenberg AFB, California** - Project Peer Reviewer for the complete design and construction details for electrical distribution systems located at Bldg. 836 within the Vandenberg Air Force Base (VAFB), in California.
- **Revitalize High and Medium Voltage Power Distribution System, NASA/Kennedy Space Center, FL, Project Peer Reviewer for:** 1) **Vehicle Assembly Building (VAB) North** - Replace 15kV Feeders and Ducts, VAB Area North; 2) Replace 15kV Feeders and Ducts, O&C Building & PHSF; 3) Replace Transformers and Switchgear at Payload Support Area; 4) Replace Protective Relays at C5, C5A & Orsino Substations with SEL Relays; 5) Modify C5 Substation for Ring Bus Configuration; and 6) Design-Build for the Replacement of Three Overhead 15kV Feeders.
- **Numerous Distribution Design Projects for NASA's Kennedy Space Center:** Oversaw complete engineering services for numerous 13.8kV and 13.2kV underground distribution projects.

FAMU

- **Campus-wide 12.47kV Overhead to Underground Distribution Conversion, Voltage Upgrade and Lighting – Phase 1-3, Tallahassee, FL.** Designed the switchgear building and a new duct and manhole system, as well as associated electrical modifications in 23 buildings and area lighting.

Prior to FW&A: Spent 10 years at JEA, first on an overhead line crew, installing and maintaining the utility's distribution system in the field. Transferred to the JEA engineering department and left JEA as a distribution engineer. Designed numerous overhead-to-underground conversions, underground network systems and developed distribution standards.

**John Grady, P.E., S.E.,
MLE, MLSE, FBRSE****Lead Structural
Engineer****Education**

Bachelor of Science,
Civil Engineering, Ohio
University

Registration

Florida PE No. 69322,
FBRSE
Georgia, PE No. 43236,
SE No. 206
South Carolina PE No.
35485
North Carolina PE No.
46248
Ohio PE No. 73591
Illinois PE No.
062.071803, SE No.
081.007993
Nevada PE No. 261180
California PE No. 89965,
SE No. 6892
Washington PE No. 55352
Maryland PE No.
58328

**Professional
Affiliations**

American Society of Civil
Engineers (ASCE)
Structural Engineering
Institute (SEI)
American Concrete
Institute (ACI)
American Institute of Steel
Construction (AISC)

Specialty Training

JEA Electrical Substation
Safety Training

John earned a Bachelor of Science in Civil Engineering degree from Ohio University. John is a licensed professional engineer in ten states.

John began his career as a structural engineer for GPD Group in Akron, Ohio. His responsibilities at GPD included structural analysis of self-supported steel lattice towers, guyed towers, and monopole towers.



John was responsible for analyzing tower structures and their supporting foundations for new antenna and equipment loadings. Where tower structures or their foundations were found to be deficient, John was responsible for designing structural modifications to bring the tower structure and its foundations into compliance with the governing codes. John was also responsible for overseeing and inspecting the construction of tower modification projects in accordance with the project construction documents.

John then relocated to Florida accepting a position as a civil engineer at Matthews Design Group Inc. in Saint Augustine, Florida. John's responsibilities at Matthews Design Group, Inc. included civil engineering design, water & reclaimed water distribution design, wastewater collection design, lift station and forcemain design, stormwater collection and conveyance design, stormwater treatment facility design, roadway design, maintenance of traffic design, project management, permitting, construction oversight and inspection for various civil engineering projects including projects in the residential, commercial, and public sectors. Simultaneously during this time John also worked as a consulting structural engineer, providing structural engineering for various projects including residential, marine, and civil structures.

In 2010 John joined Structures International, LLC where he manages a wide spectrum of structural & civil engineering projects including projects in the residential, commercial, industrial, marine, public, utility and military sectors. His responsibilities include project management, engineering analysis, engineering design, inspection, and preparation of construction drawings, specifications and reports. At Structures International, John routinely applies his broad technical experience in structural & civil engineering including structural analysis (gravity, wind, and seismic), shallow and deep foundation design, retaining wall design, structural engineering design of buildings and other structures using various materials (steel, reinforced concrete, reinforced masonry, wood, heavy timber, aluminum, light gauge steel), and civil engineering site design (roadway, water, wastewater, stormwater, maintenance of traffic).

John has over **20 years of experience** in Structural & Civil Engineering including 8 years partnering with Chen Moore Associates (formerly Fred Wilson Associates).

John has extensive experience providing structural engineering for JEA electrical substations including serving as Engineer of Record (EOR) for over twenty projects within the last 6 years, including two new JEA substations. Specific to the RFQ Scope, John has been the EOR for several JEA underground distribution vault repairs including the following projects:

JEA Underground Distribution Vault & Manhole Repair Projects

2019 110 & 112 Adams Street Vault Repair

2020/2021 Laura St. & Union St. Manhole Repair



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2020/2021 Main St. & Union St. Manhole Repair

2022/2023 Broad Street Vault Repair

2024 Julia Street Vault Repair

John also has experience working for several other utility providers in Florida providing a variety of engineering services including but not limited to:

Selected Utility Related Clients Relevant to RFQ

Jacksonville Electric Authority (JEA)

Reedy Creek Improvement District

Florida Power & Light (FPL)

Beaches Energy

Utilities Commission City of New Smyrna

Gainesville Regional Utilities

City of Ocala Utilities

City of Bartow Utilities

Florida Public Utilities

Selected Utility Related Engineering Experience Relevant to RFQ

Electrical Building Structural Engineering Design

Substation Steel Structure Design

Substation Shallow & Deep Foundation Design

Distribution Vault & Manhole Repair Design

Transformer Foundation & Containment Design

Reinforced Concrete Retaining Wall Design

Sheet Pile Design including Cofferdam Design

Reinforced Concrete Repair Design

Electrical Manhole Repair Design

Maintenance of Traffic

**Daniel Charletta, P.E.,
MLE, MLSE**

**Backup Structural
Engineer**

Education

Bachelor of Science,
Architectural Engineering,
Milwaukee School of
Engineering

Registration

Florida 54573

Professional Affiliations

American Society of Civil
Engineers (ASCE)
Structural Engineering
Institute (SEI)
American Concrete
Institute (ACI)
American Institute of Steel
Construction (AISC)

Awards

American Institute of
Architects: Meritt Award
Structures International
Office Building
American Concrete
Institute: Significant
Concrete Structure Alltel
Stadium Improvements

Dan earned a Bachelor of Science in Architectural Engineering (structures) from Milwaukee School of Engineering. He is a licensed professional engineer in fourteen states as well as a certified Model Law Structural Engineer.



After graduating, Dan worked as a civil engineer for the Village of Hoffman Estates in Illinois. He was in charge of the design and construction of the Village's annual road reconstruction project. His responsibilities included the evaluation and selection of reconstruction subjects, survey and schematic design, final design, administration of bidding process, evaluation and selection of successful bidder and management of the construction phase of the projects. In each year, the road reconstruction project was completed early and under budget.

Dan then accepted a position at Baxter & Woodman Consulting Engineers in Crystal Lake, Illinois. This firm provides municipalities with full-service water and wastewater treatment engineering as well as transportation engineering. Dan's responsibilities included the schematic planning of water and wastewater treatment plant structures, final design and preparation of structural construction drawings for the various process structures. In addition, Dan was involved in the preparation of requests for proposals (RFP's) for other municipal projects such as water tower refurbishing and bridge inspection.

Dan left the Midwest to come to Jacksonville, Florida to work for the large design-build firm, The Haskell Company. His duties included the schematic design, final design, and preparation of structural construction drawings for a variety of structures from club houses to large distribution centers to sophisticated manufacturing plants.

Dan is responsible for the management of professional practice of Structures International, a full-service civil and structural engineering firm providing professional engineering services including civil and structural design, analysis, and investigation, for a broad spectrum of clients and industries both domestic and foreign.

Dan has over **25 years of experience** in Structural & Civil Engineering including 8 years partnering with Chen Moore Associates (formerly Fred Wilson Associates).

He is the Structural Engineer of Record for more than 1,000 projects including many noteworthy projects such as the Alltel Stadium (Super Bowl Expansion) Improvements in Jacksonville, Florida; SkyVenture Vertical Wind Tunnels (Dubai, UAE; Qatar; and Penrith, Australia), and several large sculptures in Florida such as The Code Wall and Beacon in Lake Nona and The Heart of Tradition, in Tradition.

In addition to designing structures, Dan provides forensic engineering services as a structural expert witness on many cases ranging from single-family dwellings to high rise structures. He also created an engineering software application that calculates wind pressures on components in cladding in conformance with both the Florida Building Code and International Building Code.



**STRUCTURES
INTERNATIONAL**

Section 2 - Company Experience

CCNA General Engineering Services For
Electric Distribution
Solicitation Number 1411799247



COMPANY EXPERIENCE

Depth of Experience

CMA has been providing engineering design services to JEA for over 20 years. CMA has also provided similar services to other municipal electrical utilities, through continuing service contracts, including City of Ocala, Lakeland Electric, Beaches Energy, City of Bartow, Utilities Commission of New Smyrna Beach, and others, as well as institutional/industrial campuses, i.e., NASA at Kennedy Space Center, and Investor-Owned Utilities, i.e. Florida Power & Light. Distribution work performed for clients includes numerous over head and underground designs ranging from 5kV to 35kV, new development projects for industrial customers, recabling projects, fiber optic design, and overhead street lighting.

Most of the firm's electrical engineers and designers have more than 20 years of industry experience, and several of them joined CMA after extensive engineering careers with electric utilities in Florida and elsewhere. As a result, CMA engineers approach distribution design with informed consideration of operational and maintenance concerns.

Capabilities

CMA understands that services covered under a continuing contract can be wide-ranging, including projects and studies with values up to certain statutory limits. For this contract, we understand that JEA may select multiple registered and qualified firms to provide professional engineering consulting services for your electric engineering projects. All projects require a process that CMA has developed and perfected to serve its clients.

Project Management

CMA's leadership team, consisting of top management staff, ensures the project team has the support staff and resources available to successfully complete the project. CMA leadership team is expected to maintain an active role in any project, no matter its size or complexity.

Project management is the key to a successful project and must be proactive, identify issues before they become problems, and offer solutions before they become crisis. CMA will coordinate all project matters with JEA and they will be kept well informed by:

1. Constant updates
2. Consolidated and concise documentation via email
3. Conference calls and virtual meetings
4. Providing prompt meeting minutes

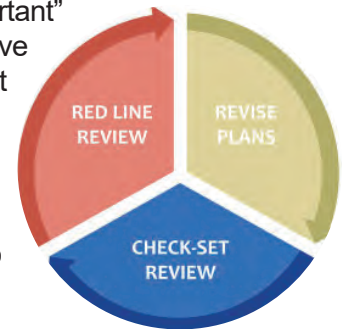
As part of our management plan, CMA implements a proactive approach that will emphasize early resolution of project issues with project stakeholders. CMA will provide the client with meeting minutes within three days of a meeting with any of the project stakeholders (including regulatory agencies). Lastly, project management not only means addressing scheduling and issues, but also project cost and client needs. We spend time scoping the project and developing accurate fees in addition to accurate schedules. CMA prides ourselves on getting the job done and minimizing additional services or changes to the contract.

CMA makes the commitment that all key support staff on the project team will be dedicated as necessary to meet the needs of JEA. All CMA staff realize that on-time delivery is a key element in meeting our commitments to clients. All of CMA proposed staff and resources are immediately available to start work on one or more of the elements identified in your RFQ.

CMA prides ourselves on getting the job done and minimizing additional services or changes to the contract

QA/QC

CMA has made QA and QC a priority and believes that it is the single “most important” element of any project. To ensure the completion of a successful project, it is imperative to develop and implement a QC plan to evaluate project performance and ensure that project objectives are being met. A QC plan will ensure that the right methodology is applied to keep the project on time and on budget. At the end of the project, this process can be used to track overall project progress and assess final goals achieved. These QC strategies require constant tracking, reviewing, and regulating the progress and performance of the project on each phase, regardless of final project objectives, to ensure results match stakeholders’ expectations.



QC is enforced to make sure our final products and proposed improvements comply with industry and engineering standards. Plans, specifications, calculation, models, estimates, and other documents will be reviewed for compliance, constructability, safety, value engineering, cost, time, and project specific concerns. The QC process also applies to early and often site visits in the field by QC staff. These site visits supplement utility coordination and will also include a “plans-in-hand” field review at each deliverable stage. Our years of experience along with our established QC process enable us to provide our clients with great service and a great product.

The actual QC process is integrated into the cost and schedule control review. The CMA Team utilizes internal and external review sessions, constructability reviews, and value engineering sessions to keep the project on schedule and within budget. By completely integrating the process, not only are the plans reviewed for accuracy, but the contract documents are scrutinized, preliminary schedules are developed, cost estimates are created, conflicts are identified, and solutions are developed.

Our Team makes use of a series of standard procedures and reports to ensure that all our services are standardized. Such reports are used during several stages of a project. Below is a list of the standard reports utilized by the CMA Team:

Kick-off Meeting Report: This report is a standard template and is utilized internally for every project. The report will contain basic information such as project name, project budget, brief project description, project manager, and project team members. In addition, the report provides contact information for the owner and client

QA/QC Checklists: This is a checklist developed by CMA. This checklist is a thorough list of items to be reviewed at each submittal. It also required the signature of the project manager, CAD technician and QA/ QC person responsible to the project.

Action Item List: This standard form is utilized to keep the team informed about the project progress. The form has an action item list, a responsible person (including clients and third parties), due date for the specific task, and a list for comments.

Permit Tracker: This standard form is utilized to track permits and provide updates of the permitting process. It also includes expected dates, dates of permit, and permit date expiration. This list is provided to the client along with all the permits.

Construction Field Reports: CMA has a series of reports utilized during construction administration services. These include field reports, RFI log, shop drawing log, items beyond scope log, etc

Our QC process utilizes two levels of review. The first level is ongoing during design where the discipline Project Manager, will review the work of the subject specific design leads to provide markups and ensure revisions are correctly made. The second level is performed by independent QC by another qualified engineer, utilizing our internal QC checklists and any additional measures at the suggestion of JEA. These QC checklists have been developed for each specific type of project and are implemented at each milestone. The independent nature of the second level review allows for a fresh perspective on the design and an “extra set of eyes” that can often identify concerns that may have been overlooked. This two-level process occurs for each deliverable and at the final design phase and is built into the schedule prior to review by City staff.

The color-coded 5-Step review as illustrated by the graphic on the previous page is intended to provide necessary change to the reviewed document and the subsequent steps taken to finalize the QC at the various submittal phases.

QUALITY CONTROL TRACKING STAMP			
PHASE _____ PLANS		% SUBMITTAL REVIEW	
QC STEP		BY	DATE
ORIGINATION	ADHERE STAMP TO COVER/PRINT PACKAGE		
CHECKED	YELLOW HIGHLIGHT – CORRECT RED – CHANGE BLUE – INFORMATION ONLY PINK HIGHLIGHT – REMOVE/DELETE		
CONCURRENCE	GREEN CHECK MARK – AGREE (✓) GREEN X-OUT – DISAGREE (X)		
CHANGES MADE	GREEN OUTLINE – INCORPORATED		
CHANGES VERIFIED	RED CHECK – APPROVE (✓)		

QC STEP	ACTION
ORIGINATION	PRINT, CHECK, REVISE, ADHERE TRACKING STAMP
CHECKED	YELLOW HIGHLIGHT – CORRECT BLUE – INFORMATIONAL, DO NOT INCLUDE ON PLAN RED – CHANGE/ADD INFORMATION AS PRESENTED PINK HIGHLIGHT – DELETE/REMOVE
CONCURRENCE	GREEN CHECK MARK (✓) – AGREE WITH COMMENT, INCORPORATE GREEN X-OUT (X) – DISAGREE WITH COMMENT, EXCLUDE
CHANGES MADE	GREEN OUTLINE – INCORPORATED
CHANGES VERIFIED	RED CHECK MARK (✓) – COMPLETED, APPROVED

The QC stamp is placed on all items to be reviewed and the completed at every stage of the QC review. Copy of all documents and correspondences are archived once changes have been made.

We strongly believe that by working as an extension of City staff and implementing a thorough QC process, we provide an extra layer of Risk Management to the design phase, and the City reviews can focus on coordination issues or stakeholder concerns. These reviews also avoid the “surprises” of unrealistic schedules, designs that are not constructible, overextended budgets, and unforeseen conflicts. By avoiding these concerns, CMA can complete a project without having to redesign the project, in either the design or construction phases. This leads to a direct time savings for CMA which leads to a direct cost savings for the client.

CMA makes Quality Assurance and Quality Control a priority and believes that it is the single **most important element of any project.**

Innovative Approaches

One of the benefits of our company's growth has been our increased capacity for technological innovation. In recent projects, the CMA Team has been able to utilize tools such as 3D visualization to evaluate potential conflicts with existing utilities and to evaluate constructability considerations. As another example, our field personnel are currently testing options for paperless construction administration services. In combination with our existing GIS tools for site investigations and construction documentation, CMA is pushing the envelope of the design profession with respect to design tools. The CMA Team prides ourselves on bringing that type of forward-looking approach to our clients and especially to JEA.

Potential Projects

- Overhead line design- Design requirements per JEA Transmission Standards, JEA Distribution Standards and the National Electric Safety Code (current edition) will include point-to-point layouts, elevation details, conductor calculations, sag and tension calculations, lightning protection, touch potential and grounding, foundations and setting depth calculations, dead-end, heavy angle and tangent structures, river crossing structures and underbuilt distribution line design.
- Underground line design- Design requirements will include point-to-point layouts, plan and profiles, elevation details, cable calculations, pulling tensions, manhole requirements, conduit/pipe calculations, termination structures and potheads, overhead connection requirements, grounding, and cathodic protection.

Power Distribution Engineering

CMA provides engineering services for medium-voltage power distribution systems from 5kV to 35kV. The firm specializes in:

- Overhead-to-underground conversions and distribution relocations associated with roadway improvements.
- Overhead and underground line design for new construction projects, as well as relocations and upgrades for system hardening
- Overhead-to-underground conversion design (including duct bank and manhole systems, and direction drilling)
- Distribution system computer modeling and analysis with tools such as SynerGEE, ETAP, SKM Power Tools, and ASPEN
- Distribution system studies (including load-flow, fault, system coordination and Arc Flash)
- Cable and equipment replacement design
- Geographic Information System (GIS) mapping with tools such as ArcFM
- Assistance with operational issues such as system losses and troubleshooting
- High-mast and conventional roadway lighting design and computer modeling with tools such as AGi32



How CMA is Uniquely Qualified

CMA has the experience and qualified engineers with individual experience in electric utility projects to continue to provide exceptional design services to JEA as we have demonstrated under the current contract.

1. Characteristics of CMA

CMA has qualified and experienced engineers that have been involved in a wide variety of electric utility projects and have worked through the various challenges such projects have presented over the years. CMA Electrical staff in Jacksonville has 9 degreed electrical engineers, seven of which are licensed professional engineers. Some of our engineers have backgrounds with a municipal utility, some with an investor-owned utility, and some with private industry. Because our staff has experience on a broad range of projects, we are able to re-deploy engineers, when necessary, without suffering a noticeable drop in the experience level.

CMA is a firm that is based on being responsive to our clients. As a small business, we believe that smaller projects and larger projects are equally important. Geographically, CMA has partnered with Florida Municipal Electric Utilities from Key West to Chattahoochee; and on a size basis from the smallest (Moore Haven and Bushnell) to the largest (JEA). We have served the municipal electric market for the last 26 years of our 60-year history as a company.

For CMA, electric utility design is our primary business. It is not an afterthought or just a minor area of service as it is for some consulting firms. In addition to the 11 engineers, our electrical team includes five designers/drafters.

2. Specific Experience of CMA

CMA is pleased to have been of service to the JEA through continuing professional services contracts established in 2000, 2005, 2010, 2014, 2017, and 2022 for various services including Distribution, Transmission, and Substation projects.

CMA has been honored to be one of the engineering firms that JEA has selected and trusted as a team member in these recent years. As your city and electric utility continue to grow, we would be pleased to assist with any of your planning, design, or operational issues, and with any of the projects related to Transmission and Substation engineering.

CMA's specific project experience is on the following pages.

World Drive North 69kV & 15kV Electric Utilities Relocation, Lake Buena Vista, FL. (Underground Project #1)

Project Design Dates: December 2016 - March 2020

Design Fee Construction Cost

\$258,144 \$6,500,000

Client: Reedy Creek Energy Services, Joseph Russo, (Joseph.N.Russo@disney.com), (321) 239-7850

Project Personnel: J. David Hopkins, P.E. (Project Manager/EOR), Freeman Bass, P.E. (Electrical Engineer), Thomas Gardner (Electrical Engineer)

CMA designed the relocation of underground distribution, optic, and transmission circuits that were impacted by the of World Drive in Lake Buena Vista, FL. The roadway required relocating (replacing) two (2) direct buried 69kV transmission circuits approximately 3500 feet each from the substation riser to a new splice pit beyond the limits of the roadway construction.

The roadway also impacted 15kV distribution duct bank and manhole system. The distribution relocation consisted of new concrete encased duct bank and manhole system, Jack and Bore a 36-inch steel casing for ten (10) 6-inch conduits under the existing road, and Directional Drilling six (6) 6-inch conduits under World Drive to relocate existing underground 15kV circuits. Approximately 11,000' LF of new three phase distribution cable was installed. Existing secondary services were impacted by the relocation, including but not limited to the street lighting and the entrance Toll Plaza complex. CMA designed new service entrance points for the Toll Plaza buildings and roadway lighting circuits to replace the existing service points that were impacted by the roadway changes. The existing SCADA optic infrastructure was replaced with new 24 count single mode and the system t that was not impacted by the roadway relocation.

CMA completed cable ampacity calculations for the ductbank, directional drill, and Jack & Bore installations. Ampacity calculations were required to verify that the heat dissipation from the cables within the spaces would not limit the cable ampacity carrying capabilities. CMA wrote technical for thermal grout and concrete that allowed for excess heat dissipation to not restrict the ampacities of the circuits.

CMA developed a sequence of construction to allow the distribution and transmission systems to stay in normal as long as possible prior to cutover to the relocated systems. CMA worked with the utility representatives to oversee the contractor during construction by reviewing shop drawings, answering RFI's, participating in weekly construction updates, and being on site as needed.

The construction drawings were delivered in PDF format and had plan and of the underground portions of the scope of work. CMA developed custom details for any deviation to the utilities standard detail or any detail that the standards did not cover. CMA

RCES Osceola Parkway at Victory Way Interchange 69kV & 15kV Electric Utilities Relocation, Lake Buena Vista, FL (Underground Project #2)

Project Design Dates: December 2015 - March 2020

Design Fee Construction Cost

\$354,950 \$14,500,000.

Client: Reedy Creek Energy Services, Joseph Russo, (Joseph.N.Russo@disney.com), (321) 239-7850

Project Personnel: David Hopkins, P.E. (Project Manager), Freeman Bass, P.E. (Electrical Engineer), Thomas Gardner (Electrical Engineer)

CMA designed the relocation of underground transmission and distribution circuits that were impacted by the of the intersection of Osceola Parkway at Victory Way. The roadway required relocating (replacing) a portion of two (2) direct buried 69kV, 1500 kcmil, EPR transmission circuits. The circuit, approximately 3600 feet from the substation riser to a new splice pit beyond the limits of the roadway construction to the east. The circuit was direct buried, with a 1450-foot section installed in directional drill consisting of 4-6-inch and 2-2-inch conduits. The second circuit, approximately 1400 feet from the substation riser to a new splice pit beyond the limits of the roadway construction to the north. The circuit was direct buried, with a 1250-foot section installed in directional drill consisting of 4-6-inch and 2-2-inch conduits.

The roadway also impacted 15kV distribution duct bank and manholes. The distribution relocation consisted of creating a new manhole and duct system to and reroute six (6) 15kV, 750 kcmil circuits along with Fiber Optic SCADA cable. The duct system consisted of new concrete encased 6- & 8-way duct bank, octagonal manholes, two (2) directional drills each having six (6) 6-inch and two (2) 2-inch conduits, and three (3) Jack and Bores each with one (1) 36-inch steel casing for ten (10) 6-inch and two (2) 2-inch conduits, two (2) under Victory Way and one (1) under Osceola Parkway.

Approximately 5,000' Circuit Feet of new three phase 69kV cable and 26,000 circuit Feet of 15kV, 750 kcmil distribution cable was installed.

CMA completed cable ampacity calculations for the ductbank, directional drill, and Jack & Bore installations. Ampacity calculations were required to verify that the heat dissipation from the cables within the spaces would not limit the cable ampacity carrying capabilities. CMA wrote technical for thermal grout and concrete that allowed for excess heat dissipation to not restrict the ampacities of the circuits.

CMA developed a sequence of construction to allow the distribution and transmission systems to stay in normal as long as possible prior to cutover to the relocated systems. CMA worked with the utility representatives to oversee the contractor during construction by reviewing shop drawings, answering RFI's, participating in weekly construction updates, and being on site as needed.

The construction drawings were delivered in PDF format and had plan and of the underground portions of the scope of work. CMA developed custom details for any deviation to the utilities standard detail or any detail that the standards did not cover. CMA

MINERAL DEVELOPMENT PROJECT, BARTOW ELECTRIC UTILITY, BARTOW, FL (OVERHEAD PROJECT #1)

Project Design Dates: January 2020 – November 2021

Project Construction Dates: November 2021 – August 2022

Design Fee: \$281,925.00 **Construction Support Fee:** \$129,634.00

Construction Cost: \$1,316,100

Client: City of Bartow, Assistant Director, Roger Murphy, rmurphy.electric@cityofbartow.net (863) 534-0142

Project Personnel: Thomas Gardner (Principal in Charge), John Franko, P.E. (Project Manager/EOR for Substation), Freeman Bass, P.E. (EOR Distribution), Chris Gearhart, P.E. (QA/QC) J. David Hopkins, P.E. (Electrical Engineer)

The City was adding a dedicated source to service a new industrial mining facility. This would add a significant load to the City's electrical system. CMA performed feasibility studies to determine the best options for serving the load. CMA developed a slate of alternate options and prepared a report of costs, benefits, and drawbacks of each. CMA then worked with the City and the end user to build a SKM system model to run loading, voltage drop, and short circuit studies.

After CMA completed the preliminary studies, CMA designed the electric system upgrades including sizing of a new 69kV-25kV power transformer, design of an expansion to the Southwest substation to add the new transformer, relay protection and control package, relay settings, a new dedicated 25kV distribution feeder circuit. CMA designed the conversion of an existing 15kV feeder into a double circuit 25kV and 15kV line. The new line was designed using ductile iron poles framed as a vertical double circuit, 25kV and 15kV, back-to-back. The new overhead pole line was approximately 2.1 miles long and was built on self-supporting poles. The 25kV circuit is dedicated to the mining facility and the 15kV circuit for normal system loads. The overhead line was designed in PLS-CADD to produce plan & profile drawings. CMA designed the poles to be self supporting, eliminating the existing guys on the existing 15kV pole line. Due to the congestion of overhead distribution leaving the substation, the new 25kV circuit was directionally drilled for the first 600' to a new riser pole, where the new double circuit distribution line started.

CMA prepared technical specifications for the procurement of owner furnished substation equipment. CMA prepared construction documents, including drawings and technical specifications for open bidding. CMA assisted the City in reviewing the bids, including recommendations for a bid award. For the owner furnished equipment, CMA reviewed the shop drawings and accompanied the city personnel during witness testing of specific equipment.

During project construction, CMA continued with reviewing the Contractor's material submittals and also provided on-site construction monitoring. The on-site monitoring was for up to three days a week to ensure the Contractor was working in a safe manner and following the City's requirements as defined in the project construction documents. This on-site monitor also allowed better project coordination and quicker response to questions that arose during construction.

When construction was complete, CMA assisted in review of contractor test reports, final inspection, commissioning, and energization of the equipment and new distribution feeder.

The construction drawings were delivered in PDF format and had plan and profiles of the overhead and underground portions of the scope of work. CMA developed custom details for any deviation to the utilities standard detail or any detail that the standards did not cover. CMA submitted technical and purchase specifications for bidding in docx format.

Smyrna to Sugarmill Express Feeders, New Smyrna Beach, FL (Overhead Project #2)

Project Design Dates: January 2019-January 2022

Project Construction Dates: Project Put on Shelf Due to Inflation

Design Fee: \$254,992

Client: Utilities Commission of New Smyrna Beach; Jameson Parker; jparker@ucnsb.com; (386) 424-3040

Project Personnel: Thomas Gardner (Principal in Charge) Freeman Bass, P.E. (EOR), Chris Gearhart, P.E. (QA/QC) J. David Hopkins, P.E., (QA/QC)

Chen Moore and Associates (CMA) was contracted by the Utilities Commission of New Smyrna Beach to add two 23kV distribution feeders to the existing Smyrna Substation. The distribution circuits were designed at 35kV due to the proximity to the coast. The circuits were designed to be routed through an existing 138kV transmission corridor. Due to the aging infrastructure in the corridor, CMA also completed the design to replace one of the 138kV transmission lines.

The initial design was developed as a new double circuit overhead feeders from the substation heading west thru the transmission corridor, over I-95, continuing thru the corridor to interconnect to two existing distribution feeders. One of the circuits was designed to be 1.1 miles and the 2nd feeder was designed to be 1.6 miles. After initial investigation, it was determined that due to the circuits having to cross interstate 95 it would be to the utilities advantage to design the distribution circuits as an underground installation until after crossing under I-95. CMA designed a ductbank and directional drilled raceway between the substation to the east side of I-95 that was approximately 0.5 miles. The crossing under I-95 was two (2) separate directional drills approximately 900 feet each consisting of 4- 8-inch HDPE SIDR conduits. Underground riser poles were designed for 1000kcmil 35kV EPR cable and group operated switches. The first distribution circuit was designed to be a vertical underbuilt on the existing 138kV transmission line, static cast concrete poles, to Airport substation, 1.1miles. The design included the evaluation of the existing transmission poles to see if adding the underbuilt circuit would meet the current extreme wind loading requirements. The design included 50-foot intermediate spun concrete poles for the distribution circuit to maintain a maximum 250-foot span on the distribution circuit. The distribution circuit consisted of 3-652 AAAC (Elgin) phase conductors and #4/0 AAAC neutral. The second distribution circuit was designed as an underbuilt on a new 138kV transmission line to the Field Street substation, 1.6 miles. The transmission and distribution poles were spun concrete, with the distribution again on 50-foot intermediate poles to maintain the 250-foot limit. The transmission conductors were 3-954 ACSR (Cardinal) and 144 fiber OPGW. The distribution circuit consisted of 3-652 AAAC (Elgin) phase conductors and #4/0 AAAC neutral.

The overhead lines were modeled is PLSCADD to verify all poles meet NESC wind loading requirements and setting depths due to poor soil conditions.

The construction drawings were delivered in PDF format and had plan and profiles of the overhead and underground portions of the scope of work. CMA developed custom details for any deviation to the utilities standard detail or any detail that the standards did not cover. CMA submitted technical and purchase specifications for bidding in docx format.

Section 3 - Jacksonville Small and Emerging Business

**CCNA General Engineering Services For
Electric Distribution
Solicitation Number 1411799247**



JACKSONVILLE SMALL AND EMERGING BUSINESS

Name	Type of service they will provide	JESEB %
Meskel & Associates Engineering, PLLC	Geotechnical Engineering	5%
VIA Consulting Services, Inc. (DBE)	Constructability Review and Inspection Support	5%



November 20, 2023

Suzanna Milbrandt
VIA Consulting Services, Inc.
10250 Normandy Blvd., Suite 304
Jacksonville, FL 32221

Re: JSEB Re-certification Approved

Dear Ms. Milbrandt:

The City of Jacksonville is pleased to announce that your company has been re-certified as a Jacksonville Small and Emerging Business Enterprise (JSEB). This certification enables your company to compete for work and perform work as a JSEB enterprise. JSEB certification does NOT guarantee work.

907 Architectural and Engineering Services, Non-Professional specifically:
-40 Engineering Services, Non-Licensed (Not Otherwise Classified)
-75 Site Assessment and Site Field Observation
918 Consulting Services specifically:
-88 Quality Assurance/Control Consulting
958 Management Services specifically:
-77 Project Management Services
961 Miscellaneous Services, No. 1 (Not Otherwise Classified) specifically:
-21 Cost Estimating

VIA Consulting Services, Inc. will be identified as a certified JSEB on our website for tracking purposes. The City of Jacksonville's Equal Business Opportunity website can be found at the web address below.

Your company's stature with the City of Jacksonville is active for two years provided there are no changes in ownership, control/operations of the company, or eligibility requirements during this certification period. Please be advised that you are required to notify this agency immediately of any changes in your business ownership, control/operations, or business service capabilities.

Sincerely,

Gregory Grant, EBO/JSEB Administrator
Equal Business Opportunity Office-Jacksonville Small Emerging Business Program

Certification Approval Date: November 20, 2023

Certification Expiration Date: December 1, 2025

214 North Hogan Street, Suite 800 Jacksonville, FL 32202 904-255-8840 Fax 904-255-8842 | www.jseeb.coj.net



August 23, 2023

Meskel and Associates Engineering, LLC
3728 Philips Hwy, Ste 208
Jacksonville, FL 32207
Attn: Antoinette Meskel

Re: JSEB Recertification Approved

Dear Ms. Meskel:

The City of Jacksonville is pleased to announce that your company has been re-certified as a Jacksonville Small and Emerging Business Enterprise (JSEB). This certification enables your company to compete for work and perform work as a JSEB enterprise. JSEB certification does NOT guarantee work. Your company is certified to participate in the areas of:

907 Architectural and Engineering Services, Non-Professional:
Refer to JSEB Directory for specific commodities
909 Building Construction Services, New (Incl. Maintenance and Repair Services):
Refer to JSEB Directory for specific commodities
912 Construction Services, General (Including Maintenance and Repair Services):
Refer to JSEB Directory for specific commodities
918 Consulting Services:
Refer to JSEB Directory for specific commodities
925 Engineering Services, Professional:
Refer to JSEB Directory for specific commodities
926 Environmental and Ecological Services:
Refer to JSEB Directory for specific commodities
989 Sampling and Sample Preparation Services (For Testing):
Refer to JSEB Directory for specific commodities

Meskel & Associates Engineering, PLLC will be identified as a certified JSEB on our website for tracking purposes. The City of Jacksonville's Equal Business Opportunity website can be found at the web address below.

Your company's stature with the City of Jacksonville is active for two years provided there are no changes in ownership, control/operations of the company, or eligibility requirements during this certification period. Please be advised that you are required to notify this agency immediately of any changes in your business ownership, control/operations, or business service capabilities.

Sincerely,

Sandy Simpson, Interim EBO/JSEB Administrator
Equal Business Opportunity Office-Jacksonville Small Emerging Business Program

Certification Approval Date: August 23, 2023

Certification Expiration Date: August 25, 2025

214 North Hogan Street, Suite 800 | Jacksonville, FL 32202 | Phone 904 255 8840 | Fax 904 255 8842 |

Section 4 - Required Forms



**CCNA General Engineering Services For
Electric Distribution
Solicitation Number 1411799247**



Appendix B – Proposal Forms
1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

Appendix B Proposal Form

COMPANY INFORMATION:

COMPANY NAME: Chen Moore and Associates
 BUSINESS ADDRESS: 501 Riverside Avenue, # 501
 CITY, STATE, ZIP CODE: Jacksonville, FL, 32202
 TELEPHONE: (904) 398-8636
 EMAIL OF CONTACT: pmoore@chenmoore.com

☒ I have read and understood the Sunshine Law/Public Records clauses contained within this solicitation. I understand that in the absence of a redacted copy my proposal will be disclosed to the public “as-is”.

The Company shall submit one electronic copy of the signed proposal documents on the sourcing platform, prior to the Bid Due Date and Time.

Company's Certification

By submitting this Proposal, the Company certifies that the Company has read and reviewed all of the documents pertaining to this RFP and agrees to abide by the terms and conditions set forth therein, that the person signing below is an authorized representative of the Company, that the Company is legally authorized to do business in the State of Florida, and that the Company maintains in active status an appropriate license for the work.

The Company certifies, under penalty of perjury, that it holds all licenses, permits, certifications, insurances, bonds and other credentials required by law, Contract or practice to perform the Work. The Company also certifies that, upon the prospect of any change in the status of applicable licenses, permits, certifications, insurances, bonds or other credentials, the Company shall immediately notify JEA of status change.

We have received addenda 1 through 1



 Signature of Authorize Officer of Firm or Agent

Peter Moore, P.E., F.ASCE, ENV SP, LEED AP,
 President

 Printed Name & Title

August 22, 2024

 Date

(954) 730-0707

 Phone Number

**Appendix B Minimum Qualifications Form
GENERAL**

THE MINIMUM QUALIFICATIONS SHALL BE SUBMITTED ON THIS FORM. IN ORDER TO BE CONSIDERED A QUALIFIED PROPOSER BY JEA YOU MUST MEET THE MINIMUM QUALIFICATIONS LISTED BELOW, AND BE ABLE TO PROVIDE ALL THE SERVICES LISTED IN THIS SOLICITATION.

THE PROPOSER MUST COMPLETE THE COMPANY INFORMATION SECTION BELOW AND PROVIDE ANY OTHER INFORMATION OR REFERENCE REQUESTED. THE PROPOSER MUST ALSO PROVIDE ANY ATTACHMENTS REQUESTED WITH THIS MINIMUM QUALIFICATIONS FORM.

PLEASE SUBMIT AN ELECTRONIC COPY OF THIS FORM AND ANY REQUESTED ADDITIONAL DOCUMENTATION WITH THE BID SUBMISSION.

COMPANY INFORMATION

COMPANY NAME: Chen Moore and Associates
BUSINESS ADDRESS: 501 Riverside Avenue, # 501
CITY, STATE, ZIP CODE: Jacksonville, FL, 32202
TELEPHONE: (904) 398-8636
E-MAIL: pmoore@chenmoore.com

PRINT NAME OF AUTHORIZED REPRESENTATIVE: Peter Moore, P.E., F.ASCE, ENV SP, LEED AP

SIGNATURE OF AUTHORIZED REPRESENTATIVE: _____

NAME AND TITLE OF AUTHORIZED REPRESENTATIVE: Peter Moore, P.E., F.ASCE, ENV SP, LEED AP, President

Respondent must meet the following Minimum Qualifications to be considered eligible to have its Response evaluated by JEA. Respondent must complete and submit the Minimum Qualification Form provided in this Solicitation. Respondents that are working or have worked for JEA in the past 2 years involving similar work must submit JEA as a reference. JEA reserves the right to ask for additional back up documentation or additional reference projects to confirm the Respondent meets the requirements stated above.

JEA may reject Responses from Respondents not meeting all of the following Minimum Qualifications:

The Proposer must have successfully completed two (2) similar overhead distribution and two (2) similar underground distribution substation projects, within the last five (5) years as of the proposal due date.

A similar overhead distribution project is defined as:

- A distribution engineering design project of a 13kV or higher overhead distribution line with an engineering contract value greater than \$100,000.

A similar underground distribution project is defined as:

- A distribution engineering design project of a 13kV or higher underground distribution line with an engineering contract value greater than \$100,000.

Any Respondent whose contract with JEA was terminated for default within the last two years shall have its Response rejected.

Appendix B – Proposal Forms

1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

Project Overhead Distribution Engineering Design 1Reference Company Name City of BartowReference Contact Person Name Roger MurphyReference Contact Person Phone Number (863) 534-0142Reference Contact Person E-Mail Address rmurphy.electric@cityofbartow.netDate Work Began/Date Work Complete January 2020 – August 2022Contract Value Design Fee: \$281,925.00 Construction Support Fee: \$129,634.00

Description of Project _____

Mineral Development Project, Bartow Electric Utility, Bartow, FL (Overhead Project #1). The City was adding a dedicated source to service a new industrial mining facility. This would add a _____ load to the City's electrical system. CMA performed feasibility studies to determine the best options for serving the load. CMA developed a slate of alternate options and prepared a report of costs, _____ and drawbacks of each. CMA then worked with the City and the end user to build a SKM system model to run loading, voltage drop, and short circuit studies.

After CMA completed the preliminary studies, CMA designed the electric system upgrades including sizing of a new 69kV-25kV power transformer, design of an expansion to the Southwest substation to add the new transformer, relay protection and control package, relay settings, a new dedicated 25kV distribution feeder circuit. CMA designed the conversion of an existing 15kV feeder into a double circuit 25kV and 15kV line. The new line was designed using ductile iron poles framed as a vertical double circuit, 25kV and 15kV, back-to-back. The 25kV circuit is dedicated to the mining facility and the 15kV circuit for normal system loads. Due to the congestion of overhead distribution leaving the substation, the new 25kV circuit was directionally _____ to a new riser pole, where the new double circuit distribution line started.

CMA prepared technical _____ for the procurement of owner furnished substation equipment. CMA prepared construction documents, including drawings and technical _____ for open bidding. CMA assisted the City in reviewing the bids, including recommendations for a bid award. For the owner furnished equipment, CMA reviewed the shop drawings and accompanied the city personnel during witness testing of _____

During project construction, CMA continued with reviewing the Contractor's material submittals and also provided on-site construction monitoring. The on-site monitoring was for up to three days a week to ensure the Contractor was working in a safe manner and following the City's requirements as _____ in the project construction documents. This on-site monitor also allowed better project coordination and quicker response to questions that arose during construction.

When construction was complete, CMA assisted in review of contractor test reports, _____ inspection, commissioning, and energization of the equipment and new distribution feeder.

Appendix B – Proposal Forms
1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

Project Overhead Distribution Engineering Design 2

Reference Company Name Utilities Commission of New Smyrna Beach
 Reference Contact Person Name Jameson Parker
 Reference Contact Person Phone Number (386) 424-3040
 Reference Contact Person E-Mail Address jparker@ucnsb.com
 Date Work Began/Date Work Complete January 2019-January 2022
 Contract Value \$254,992

Description of Project

Smyrna to Sugarmill Express Feeders, New Smyrna Beach, Fl. Chen Moore and Associates (CMA) was contracted by the Utilities Commission of New Smyrna Beach to add two 23kV distribution feeders to the existing Smyrna Substation. The distribution circuits were designed at 35kV due to the proximity to the coast. The circuits were designed to be routed through an existing 138kV transmission corridor. Due to the aging infrastructure in the corridor, CMA also completed the design to replace one of the 138kV transmission lines.

The initial design was developed as a new double circuit overhead feeders from the substation heading west thru the transmission corridor, over I-95, continuing thru the corridor to interconnect to two existing distribution feeders. One of the circuits was designed to be 1.1 miles and the 2nd feeder was designed to be 1.6 miles. After initial investigation, it was determined that due to the circuits having to cross interstate 95 it would be to the utilities advantage to design the distribution circuits as an underground installation until after crossing under I-95. CMA designed a ductbank and directional drilled raceway between the substation to the east side of I-95 that was approximately 0.5 miles. The crossing under I-95 was two (2) separate directional drills approximately 900 feet each consisting of 4- 8-inch HDPE SDR conduits. Underground riser poles were designed for 1000kcmil 35kV EPR cable and group operated switches. The distribution circuit was designed to be a vertical underbuilt on the existing 138kV transmission line, static cast concrete poles, to Airport substation, 1.1miles. The design included the evaluation of the existing transmission poles to see if adding the underbuilt circuit would meet the current extreme wind loading requirements. The design included 50-foot intermediate spun concrete poles for the distribution circuit to maintain a maximum 250-foot span on the distribution circuit. The distribution circuit consisted of 3-652 AAAC (Elgin) phase conductors and #4/0 AAAC neutral. The second distribution circuit was designed as an underbuilt on a new 138kV transmission line to the Field Street substation, 1.6 miles. The transmission and distribution poles were spun concrete, with the distribution again on 50-foot intermediate poles to maintain the 250-foot limit. The transmission conductors were 3-954 ACSR (Cardinal) and 144 OPGW. The distribution circuit consisted of 3-652 AAAC (Elgin) phase conductors and #4/0 AAAC neutral.

The overhead lines were modeled is PLSCADD to verify all poles meet NESC wind loading requirements and setting depths due to poor soil conditions.

The construction drawings were delivered in PDF format and had plan and of the overhead and underground portions of the scope of work. CMA developed custom details for any deviation to the utilities standard detail or any detail that the standards did not cover. CMA submitted technical and purchase

Appendix B – Proposal Forms
1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

Project Underground Distribution Engineering Design 1

Reference Company Name	Reedy Creek Energy Services	
Reference Contact Person Name	Joseph Russo	
Reference Contact Person Phone Number	(321) 239-7850	
Reference Contact Person E-Mail Address	Joseph.N.Russo@disney.com	
Date Work Began/Date Work Complete	December 2016 - March 2020	
Contract Value	Design Fee	Construction Cost
Description of Project	\$258,144	\$6,500,000

World Drive North 69kV & 15kV Electric Utilities Relocation, Lake Buena Vista, FL.

CMA designed the relocation of underground distribution, optic, and transmission circuits that were impacted by the of World Drive in Lake Buena Vista, FL. The roadway required relocating (replacing) two (2) direct buried 69kV transmission circuits approximately 3500 feet each from the substation riser to a new splice pit beyond the limits of the roadway construction. The roadway n also impacted 15kV distribution duct bank and manhole system. The distribution relocation consisted of new concrete encased duct bank and manhole system, Jack and Bore a 36-inch steel casing for ten (10) 6-inch conduits under the existing road, and Directional Drilling six (6) 6-inch conduits under World Drive to relocate existing underground 15kV circuits. Approximately 11,000' LF of new three phase distribution cable was installed. Existing secondary services were impacted by the relocation, including but not limited to the street lighting and the entrance Toll Plaza complex. CMA designed new service entrance points for the Toll Plaza buildings and roadway lighting circuits to replace the existing service points that were impacted by the roadway changes. The existing SCADA optic infrastructure was replaced with new 24 count single mode and the system was installed from the substation to the piece of equipment that was not impacted by the roadway relocation.

CMA completed cable ampacity calculations for the ductbank, directional drill, and Jack & Bore installations. Ampacity calculations were required to verify that the heat dissipation from the cables within the spaces would not limit the cable ampacity carrying capabilities. CMA wrote technical for thermal grout and concrete that allowed for excess heat dissipation to not restrict the ampacities of the circuits.

CMA developed a sequence of construction to allow the distribution and transmission systems to stay in normal as long as possible prior to cutover to the relocated systems. CMA worked with the utility representatives to oversee the contractor during construction by reviewing shop drawings, answering RFI's, participating in weekly construction updates, and being on site as needed.

Appendix B – Proposal Forms
1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

Project Underground Distribution Engineering Design 2

Reference Company Name Reedy Creek Energy Services
 Reference Contact Person Name Joseph Russo
 Reference Contact Person Phone Number (321) 239-7850
 Reference Contact Person E-Mail Address Joseph.N.Russo@disney.com
 Date Work Began/Date Work Complete December 2015 - March 2020
 Contract Value Design Fee: \$354,950 Construction Cost: \$14,500,000

Description of Project _____

RCES Osceola Parkway at Victory Way Interchange 69kV & 15kV Electric Utilities Relocation, Lake Buena Vista, FL. CMA designed the relocation of underground transmission and distribution circuits that were impacted by the _____ of the intersection of Osceola Parkway at Victory Way. The roadway _____ required relocating (replacing) a portion of two (2) direct buried 69kV, 1500 kcmil, EPR transmission circuits. The _____ circuit, approximately 3600 feet from the substation riser to a new splice pit beyond the limits of the roadway construction to the east. The circuit was direct buried, with a 1450-foot section installed in directional drill consisting of 4-6-inch and 2-2-inch conduits. The second circuit, approximately 1400 feet from the substation riser to a new splice pit beyond the limits of the roadway construction to the north. The circuit was direct buried, with a 1250-foot section installed in directional drill consisting of 4-6-inch and 2-2-inch conduits.

The roadway _____ on also impacted 15kV distribution duct bank and manholes. The distribution relocation consisted of creating a new manhole and duct system to _____ and reroute six (6) 15kV, 750 kcmil circuits along with Fiber Optic SCADA cable. The duct system consisted of new concrete encased 6- & 8-way duct bank, _____ octagonal manholes, two (2) directional drills each having six (6) 6-inch and two (2) 2-inch conduits, and three (3) Jack and Bores each with one (1) 36-inch steel casing for ten (10) 6-inch and two (2) 2-inch conduits, two (2) under Victory Way and one (1) under Osceola Parkway.

Approximately 5,000' Circuit Feet of new three phase 69kV cable and 26,000 circuit Feet of 15kV, 750 kcmil distribution cable was installed.

CMA completed cable ampacity calculations for the ductbank, directional drill, and Jack & Bore installations. Ampacity calculations were required to verify that the heat dissipation from the cables within the spaces would not limit the cable ampacity carrying capabilities. CMA wrote technical _____ for thermal grout and concrete that allowed for excess heat dissipation to not restrict the ampacities of the circuits.

CMA developed a sequence of construction to allow the distribution and transmission systems to stay in normal _____ as long as possible prior to _____ cutover to the relocated systems. CMA worked with the utility representatives to oversee the contractor during construction by reviewing shop drawings, answering RFI's, participating in weekly construction updates, and being on site as needed.

The construction drawings were delivered in PDF format and had plan and _____ of the underground portions of the scope of work. CMA developed custom details for any deviation to the utilities standard detail or any detail that the standards did not cover. CMA submitted technical _____ for bidding in docx format.

Appendix B – Proposal Forms
1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

LIST OF SUBCONTRACTORS

JEA Solicitation Number 1411799247 requires certain major Subcontractors be listed on this form, unless the work will be self-performed by the Company.

The undersigned understands that failure to submit the required Subcontractor information on this form will result in bid rejection, and the Company agrees to employ the Subcontractors specified below: (Use additional sheets as necessary)

Note: This list of Subcontractors shall not be modified subsequent to bid opening, without a showing of good cause and the written consent of JEA.

Type of Work	Corporate Name of Subcontractor	Subcontractor Primary Contact Person & Telephone Number	Subcontractor's License Number (if applicable)	Percentage of Work or Dollar Amount
Surveying	Surveying and Mapping, LLC		Professional Surveyor 5613	3%
Geotechnical Engineering	Meskel & Associates Engineering, PLLC	Brett Harbison, P.E. (904) 519-699	Professional Engineer 74679	5%
Structural Engineering	Structures International, LLC	John Grady PE,SE,MLSE (904) 296-2646	Professional Engineer 69322	5%
Constructability Review and Inspection Support	VIA Consulting Services, Inc. (DBE)	Peter J. Sheridan, III, P.E. (904) 735-5174	Professional Engineer 45993	5%

Signed: Peter Moore, P.E., F.ASCE, ENV SP, LEED AP

Company: Chen Moore and Associates
501 Riverside Avenue, # 501

Address: Jacksonville, FL 32202

Date: August 22, 2024

Appendix B – Proposal Forms
1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

LIST OF JSEB SUBCONTRACTORS

The following JSEB Subcontractors will be utilized in fulfilling the terms and conditions of a Project Authorization arising from award of JEA - CMA . I (We) the undersigned understand that failure to submit said information will result in bid rejection. I (We) will employ the JSEB Subcontractors specified below: (Use additional sheets as necessary)

Class of Work (Category) Dollar Amount	Name of JSEB Contractor (Indicate below)	Percentage of Total Job or
Geotechnical Engineering	Meskel & Associates Engineering, PLLC	5%
Constructability Review and Inspection Support	VIA Consulting Services, Inc. (DBE)	5%



November 20, 2023

Suzanna Milbrandt
VIA Consulting Services, Inc.
10250 Normandy Blvd., Suite 304
Jacksonville, FL 32221

Re: JSEB Re-certification Approved

Dear Ms. Milbrandt:

The City of Jacksonville is pleased to announce that your company has been re-certified as a Jacksonville Small and Emerging Business Enterprise (JSEB). This certification enables your company to compete for work and perform work as a JSEB enterprise. JSEB certification does NOT guarantee work.

907 Architectural and Engineering Services, Non-Professional specifically:
-40 Engineering Services, Non-Licensed (Not Otherwise Classified)
-75 Site Assessment and Site Field Observation
918 Consulting Services specifically:
-88 Quality Assurance/Control Consulting
928 Management Services specifically:
-77 Project Management Services
961 Miscellaneous Services, No. 1 (Not Otherwise Classified) specifically:
-21 Cost Estimating

VIA Consulting Services, Inc. will be identified as a certified JSEB on our website for tracking purposes. The City of Jacksonville's Equal Business Opportunity website can be found at the web address below.

Your company's stature with the City of Jacksonville is active for two years provided there are no changes in ownership, control/operations of the company, or eligibility requirements during this certification period. Please be advised that you are required to notify this agency immediately of any changes in your business ownership, control/operations, or business service capabilities.

Sincerely,

Gregory Grant, EBO/JSEB Administrator
Equal Business Opportunity Office-Jacksonville Small Emerging Business Program

Certification Approval Date: November 20, 2023

Certification Expiration Date: December 1, 2025

214 North Hogan Street, Suite 800 Jacksonville, FL 32202 904-255-8840 Fax 904-255-8842 www.jsebjcoi.net



August 23, 2023

Meskel and Associates Engineering, LLC
3728 Philips Hwy, Ste 208
Jacksonville, FL 32207
Attn: Antoinette Meskel

Re: JSEB Recertification Approved

Dear Ms. Meskel:

The City of Jacksonville is pleased to announce that your company has been re-certified as a Jacksonville Small and Emerging Business Enterprise (JSEB). This certification enables your company to compete for work and perform work as a JSEB enterprise. JSEB certification does NOT guarantee work. Your company is certified to participate in the areas of:

907 Architectural and Engineering Services, Non-Professional:
Refer to JSEB Directory for specific commodities
909 Building Construction Services, New (Incl. Maintenance and Repair Services):
Refer to JSEB Directory for specific commodities
912 Construction Services, General (Including Maintenance and Repair Services):
Refer to JSEB Directory for specific commodities
918 Consulting Services:
Refer to JSEB Directory for specific commodities
925 Engineering Services, Professional:
Refer to JSEB Directory for specific commodities
926 Environmental and Ecological Services:
Refer to JSEB Directory for specific commodities
989 Sampling and Sample Preparation Services (For Testing):
Refer to JSEB Directory for specific commodities

Meskel & Associates Engineering, PLLC will be identified as a certified JSEB on our website for tracking purposes. The City of Jacksonville's Equal Business Opportunity website can be found at the web address below.

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Sincerely,

Sandy Simpson, Interim EBO/JSEB Administrator
Equal Business Opportunity Office-Jacksonville Small Emerging Business Program

Certification Approval Date:

August 23, 2023

Certification Expiration Date:

August 25, 2025

214 North Hogan Street, Suite 800 Jacksonville, FL 32202 | Phone 904 255 8840 | Fax 904 255 8842 |

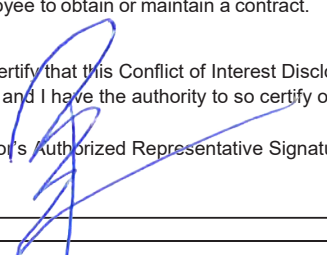
Peter Moore, P.E., F.ASCE, ENV
SP, LEED AP

Signed: _____

Company: Chen Moore and AssociatesAddress: 501 Riverside Ave, #501 Jacksonville, FL 32202Date: August 22, 2024

CONFLICT OF INTEREST DISCLOSURE FORM

*Disclosing a potential conflict of interest does not disqualify vendors. In the event vendors do not disclose potential conflicts of interest, and they are detected by JEA, vendor may be **disqualified** from doing business with JEA. Questions about this form? Contact (JEA, fill in the blank)*

JEA Bid/Solicitation/Contract Number: 1411799247	Name of JEA Employee(s) Working on Vendor's Current Contract(s) with JEA: N/A	
Vendor Name: Chen Moore and Associates		Vendor Phone: (904) 398-8636
Vendor's Authorized Representative Name and Title: Peter Moore, P.E., F.ASCE, ENV SP, LEED AP, President		Authorized Representative's Phone: (904) 398-8636
NAME(S) OF JEA EMPLOYEE(S) / PUBLIC OFFICER(S) WITH POTENTIAL CONFLICT OF INTEREST		
Name of JEA public officer(s), employee(s), or relatives with whom there may be a potential conflict of interest. If more than five, attach a second form.		Relationship of JEA public officer(s)/employee(s) and/or relative(s) to vendor's company from list above (e.g. 1(a), 2, etc.). Please list all that apply:
1. N/A		
2.		
3.		
4.		
5.		
<input checked="" type="checkbox"/> Vendor has no conflict of interest to report. <input type="checkbox"/> Vendor hereby declares it has not and will not provide gifts or hospitality of any dollar value or any other gratuities to any JEA officer or employee to obtain or maintain a contract. <input type="checkbox"/> I certify that this Conflict of Interest Disclosure has been examined by me and that its contents are true and correct to my knowledge and belief and I have the authority to so certify on behalf of the Vendor.		
Vendor's Authorized Representative Signature: 		Date: August 22, 2024

Peter Moore, P.E., F.ASCE, ENV SP, LEED AP

FOR JEA USE ONLY IF CONFLICT NOTED
This form has been reviewed by:

Name of JEA Ethics Officer:	Signature:	Date:
Note:		



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
01/03/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER LassiterWare LLC 1300 N. Westshore Blvd Suite 110 Tampa FL 33607		CONTACT NAME: Gildo Benitez PHONE (A/C, No, Ext): (800) 845-8437 FAX (A/C, No): (888) 883-8680 E-MAIL: GildoB@lassiterware.com ADDRESS:															
INSURED Chen Moore & Associates, Inc. dba CMA 500 W. Cypress Creek Road Suite 600 Fort Lauderdale FL 33309		INSURER(S) AFFORDING COVERAGE <table border="1"> <tr> <th>INSURER</th> <th>NAIC #</th> </tr> <tr> <td>INSURER A: Crum & Forster Specialty Insurance Co</td> <td>44520.</td> </tr> <tr> <td>INSURER B: Travelers Cas Ins Co of Amer</td> <td>19046</td> </tr> <tr> <td>INSURER C: Travelers Casualty & Surety Co</td> <td>19038</td> </tr> <tr> <td>INSURER D:</td> <td></td> </tr> <tr> <td>INSURER E:</td> <td></td> </tr> <tr> <td>INSURER F:</td> <td></td> </tr> </table>		INSURER	NAIC #	INSURER A: Crum & Forster Specialty Insurance Co	44520.	INSURER B: Travelers Cas Ins Co of Amer	19046	INSURER C: Travelers Casualty & Surety Co	19038	INSURER D:		INSURER E:		INSURER F:	
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INSURER D:																	
INSURER E:																	
INSURER F:																	

COVERAGES		CERTIFICATE NUMBER: 24-25 with forms		REVISION NUMBER:			
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.							
INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Contractors Pollution Liability GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:	Y	Y	EPK146345	01/01/2024	01/01/2025	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 Contractors Pollution \$ 1,000,000
B	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY	Y	Y	BA2W1500872347G	01/01/2024	01/01/2025	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ PIP-Basic \$ 10,000
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED \$ RETENTION \$			EFX124401	01/01/2024	01/01/2025	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N	N/A	UB2W1488912347G	01/01/2024	01/01/2025	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
A	Professional Liability (Claims-Made) Limits Included in General Liability			EPK146345	01/01/2024	01/01/2025	Each claim \$1,000,000 Aggregate \$2,000,000
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) Re: SJRPP Substation Upgrades JEA, including its board members, officers, employees, agents, successors, and assigns are included as additional insured under the terms and conditions of the attached forms on the General Liability policy, on a primary and non-contributory basis, and the Automobile Liability policy when additional insured status is required by written contract. Blanket Waiver of Subrogation is included as part of the General Liability and Automobile Liability policies and apply when required by written contract, provided the contract is executed prior to any loss.							

CERTIFICATE HOLDER	CANCELLATION
JEA 21 West Church Street Jacksonville FL 32202	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE

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ACORD 25 (2016/03)

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Form (Rev. October 2018) Department of the Treasury Internal Revenue Service	<h2 style="margin: 0;">Request for Taxpayer Identification Number and Certification</h2> <p style="margin: 0;">▶ Go to www.irs.gov/FormW9 for instructions and the latest information.</p>	Give Form to the requester. Do not send to the IRS.
1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank. CHEN MOORE & ASSOCIATES INC		
2 Business name/disregarded entity name, if different from above		
Print or type. See Specific Instructions on page 3.	3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes.	
	<input type="checkbox"/> Individual/sole proprietor or single-member LLC	
	<input checked="" type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate	
	<input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____ Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.	
<input type="checkbox"/> Other (see instructions) ▶ _____		4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) _____ Exemption from FATCA reporting code (if any) _____ <small>(Applies to accounts maintained outside the U.S.)</small>
5 Address (number, street, and apt. or suite no.) See instructions. 500 W CYPRESS CREEK RD SUITE 600		Requester's name and address (optional)
6 City, state, and ZIP code FORT LAUDERDALE, FL 33309		
7 List account number(s) here (optional)		

Part I Taxpayer Identification Number (TIN)																																																			
Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see <i>How to get a TIN</i> , later.																																																			
Note: If the account is in more than one name, see the instructions for line 1. Also see <i>What Name and Number To Give the Requester</i> for guidelines on whose number to enter.																																																			
<table style="width: 100%;"> <tr> <td colspan="10" style="text-align: center;">Social security number</td> </tr> <tr> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> </tr> <tr> <td colspan="10" style="text-align: center;">or</td> </tr> <tr> <td colspan="10" style="text-align: center;">Employer identification number</td> </tr> <tr> <td style="border: 1px solid black; width: 20px; height: 20px;">5</td> <td style="border: 1px solid black; width: 20px; height: 20px;">9</td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px;">2</td> <td style="border: 1px solid black; width: 20px; height: 20px;">7</td> <td style="border: 1px solid black; width: 20px; height: 20px;">3</td> <td style="border: 1px solid black; width: 20px; height: 20px;">9</td> <td style="border: 1px solid black; width: 20px; height: 20px;">8</td> <td style="border: 1px solid black; width: 20px; height: 20px;">6</td> <td style="border: 1px solid black; width: 20px; height: 20px;">6</td> </tr> </table>		Social security number																				or										Employer identification number										5	9		2	7	3	9	8	6	6
Social security number																																																			
or																																																			
Employer identification number																																																			
5	9		2	7	3	9	8	6	6																																										

Part II Certification	
Under penalties of perjury, I certify that:	
1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and	
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and	
3. I am a U.S. citizen or other U.S. person (defined below); and	
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.	
Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.	

Sign Here	Signature of U.S. person ▶	Date ▶ 01/02/24
------------------	----------------------------	-----------------

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)
Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

THE OFFICIAL SITE OF THE FLORIDA DEPARTMENT OF BUSINESS & PROFESSIONAL REGULATION


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ONLINE SERVICES

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[View Food & Lodging Inspections](#)
[File a Complaint](#)
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[View Application Status](#)
[Find Exam Information](#)
[Unlicensed Activity Search](#)
[AB&T Delinquent Invoice & Activity List Search](#)

LICENSEE DETAILS

12:36:06 PM 11/10/2023

Licensee Information

Name: CHEN MOORE AND ASSOCIATES, INC. (Primary Name)
 Main Address: 500 W. CYPRESS CREEK ROAD #600
 FORT LAUDERDALE Florida 33309
 County: BROWARD

License Information

License Type: Engineering Business Registry
 Rank: Registry
 License Number: 4593
 Status: Current
 Licensure Date: 01/09/1987
 Expires:

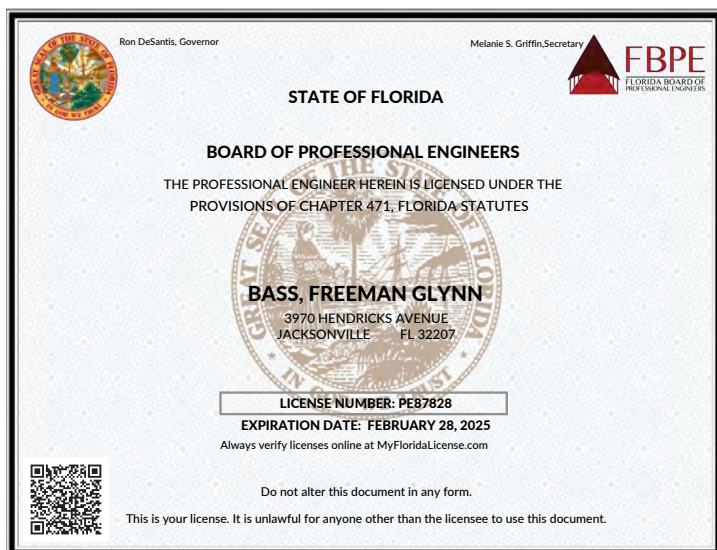
Special Qualifications

Qualification Effective

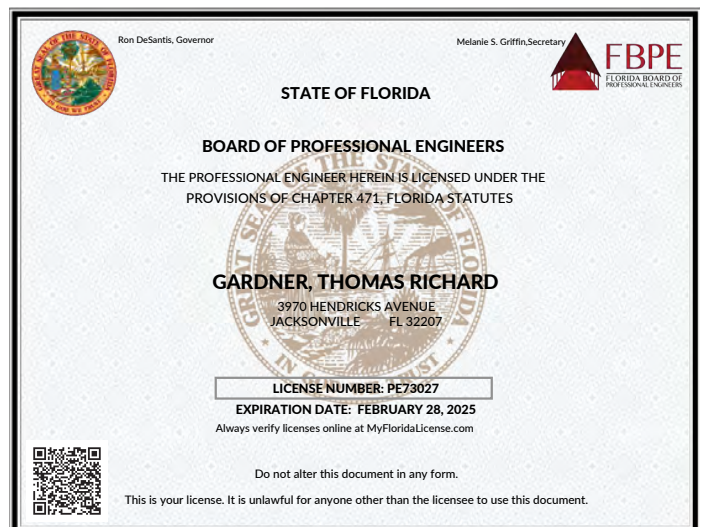
Alternate Names

[View Related License Information](#)
[View License Complaint](#)

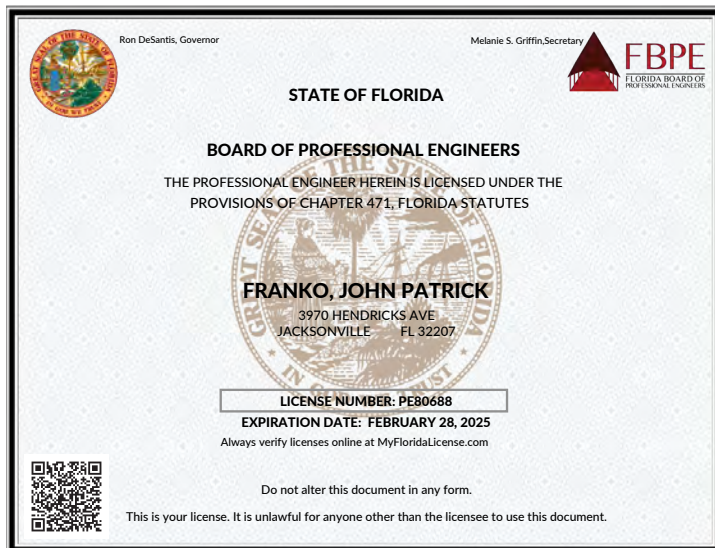
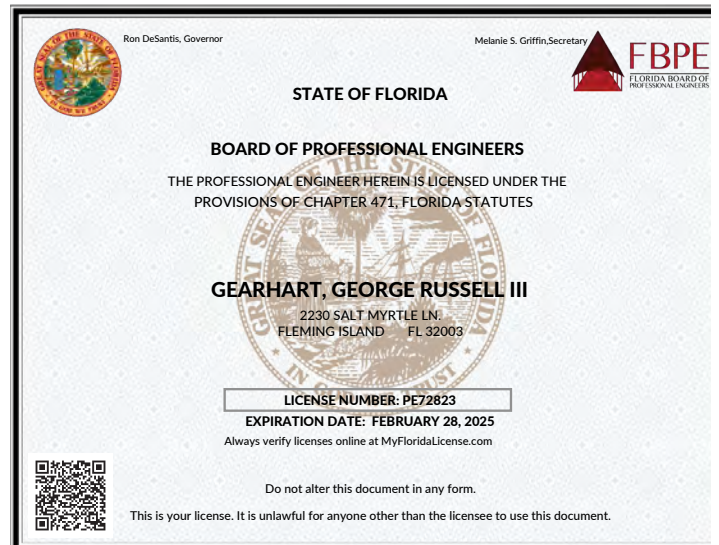
State of FL Professional Engineers
License - Peter Moore is the
qualified for the firm.



Freeman Bass, P.E.



Thomas Gardner, P.E.

**John Franko, P.E.****Chris Gearhart, III, P.E.**

State of Florida Department of State

I certify from the records of this office that CHEN MOORE AND ASSOCIATES, INC. is a corporation organized under the laws of the State of Florida, filed on November 7, 1986.

The document number of this corporation is J41454.

I further certify that said corporation has paid all fees due this office through December 31, 2024, that its most recent annual report/uniform business report was filed on January 4, 2024, and that its status is active.

I further certify that said corporation has not filed Articles of Dissolution.

*Given under my hand and the
Great Seal of the State of Florida
at Tallahassee, the Capital, this
the Fourth day of January, 2024*

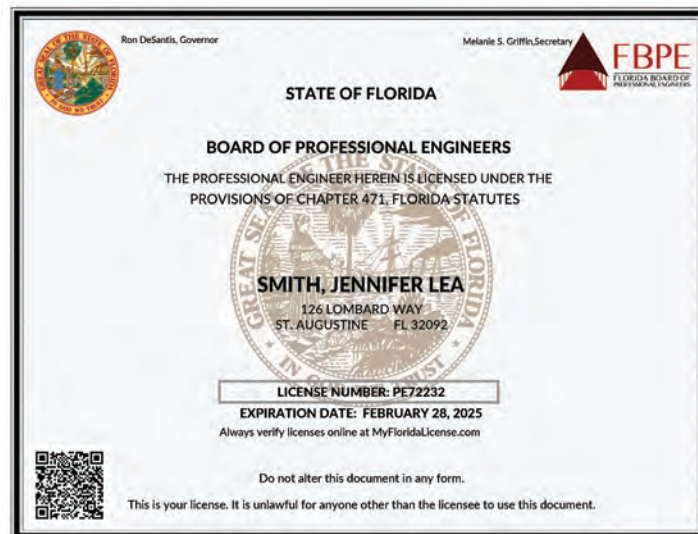


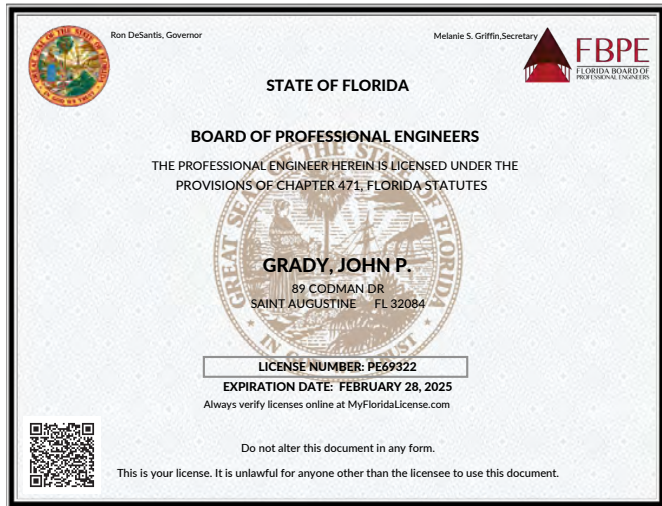
[Signature]
Secretary of State

Tracking Number: 9235937734CC

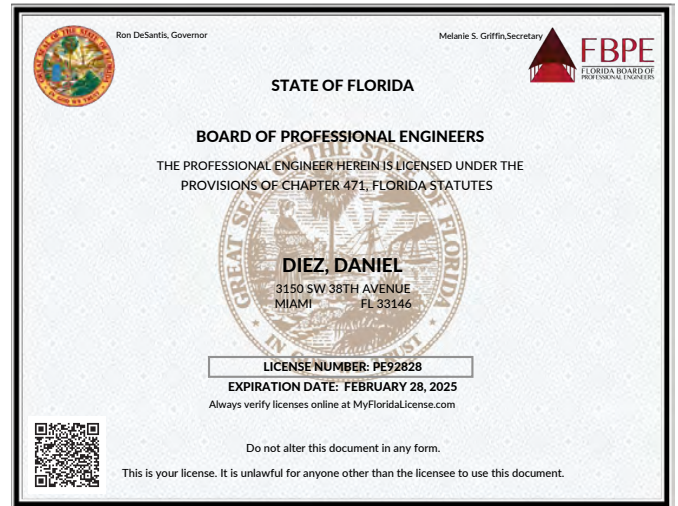
To authenticate this certificate, visit the following site, enter this number, and then follow the instructions displayed.

<https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication>

**Jennifer Smith, P.E.**



John Grady, P.E.



Daniel Diez, P.E.

2024 FLORIDA PROFIT CORPORATION ANNUAL REPORT

DOCUMENT# J41454

Entity Name: CHEN MOORE AND ASSOCIATES, INC.**Current Principal Place of Business:**500 WEST CYPRESS CREEK ROAD
SUITE 600
FORT LAUDERDALE, FL 33309**Current Mailing Address:**500 WEST CYPRESS CREEK ROAD
SUITE 600
FORT LAUDERDALE, FL 33309 US**FEI Number:** 59-2739866**Certificate of Status Desired:** Yes**Name and Address of Current Registered Agent:**MOORE, PETER MDP
500 WEST CYPRESS CREEK ROAD
SUITE 600
FORT LAUDERDALE, FL 33309 US*The above named entity submits this statement for the purpose of changing its registered office or registered agent, or both, in the State of Florida.***SIGNATURE:**

Electronic Signature of Registered Agent

Date

Officer/Director Detail :

Title	DP
Name	MOORE, PETER M
Address	500 WEST CYPRESS CREEK ROAD SUITE 600
City-State-Zip:	FORT LAUDERDALE FL 33309

Title	DT
Name	MCCLAIR, JASON J
Address	500 WEST CYPRESS CREEK ROAD SUITE 600
City-State-Zip:	FORT LAUDERDALE FL 33309

Title	D
Name	HARRISON, ERIC D
Address	500 WEST CYPRESS CREEK ROAD SUITE 600
City-State-Zip:	FORT LAUDERDALE FL 33309

Title	SECRETARY
Name	BREA, SAFIYA T
Address	500 WEST CYPRESS CREEK ROAD SUITE 600
City-State-Zip:	FORT LAUDERDALE FL 33309

Title	CFO
Name	DANNELLY, SEAN E
Address	500 WEST CYPRESS CREEK ROAD SUITE 600
City-State-Zip:	FORT LAUDERDALE FL 33309

Title	VP
Name	ACOSTA, JOSE L
Address	500 WEST CYPRESS CREEK ROAD SUITE 600
City-State-Zip:	FORT LAUDERDALE FL 33309

Title	DO
Name	LEHR, GREGORY BENJAMIN
Address	500 WEST CYPRESS CREEK ROAD SUITE 600
City-State-Zip:	FORT LAUDERDALE FL 33309

I hereby certify that the information indicated on this report or supplemental report is true and accurate and that my electronic signature shall have the same legal effect as if made under oath; that I am an officer or director of the corporation or the receiver or trustee empowered to execute this report as required by Chapter 607, Florida Statutes; and that my name appears above, or on an attachment with all other like empowered.

SIGNATURE: SEAN DANNELLY

CFO

01/04/2024

Electronic Signature of Signing Officer/Director Detail

Date



ema

chen moore and associates

OUR SERVICES

**CIVIL ENGINEERING
TRANSPORTATION ENGINEERING
ELECTRICAL ENGINEERING
LANDSCAPE ARCHITECTURE
PLANNING
ENVIRONMENTAL
CONSTRUCTION MANAGEMENT**

OUR MARKETS

**WATER & WASTEWATER
WATER RESOURCES
TRANSPORTATION
ENERGY
COMMUNITY ADVANCEMENT
LAND DEVELOPMENT**

CORPORATE

500 West Cypress Creek Road
Suite 600
Fort Lauderdale, FL 33309
+1 (954) 730-0707

REGIONAL OFFICES

Orlando (Maitland)
Jacksonville
West Palm Beach
Miami

ADDITIONAL OFFICES

Tampa
Sarasota (Nokomis)
Gainesville
Port St. Lucie
Jupiter
Atlanta

PEOPLE THAT CARE
www.chenmoore.com

2024/2025 Hourly Rate Schedule

<u>Labor Category</u>	<u>Hourly Rate</u>
President	\$550
Principal	\$400
Principal Engineer	\$330
Sr. Program Engineer	\$280
Program Engineer	\$240
Senior Engineer	\$215
Project Engineer	\$190
Associate Engineer III	\$175
Associate Engineer II	\$155
Associate Engineer	\$135
Engineer	\$120
Principal Landscape Architect	\$230
Senior Landscape Architect	\$170
Project Landscape Architect	\$130
Associate Landscape Architect	\$115
Senior Landscape Designer	\$115
Landscape Designer	\$100
Principal Planner	\$240
Senior Planner	\$150
Project Planner	\$110
Associate Planner	\$95
Urban Designer	\$90
Senior Project Manager	\$260
Senior Environmental Scientist	\$160
Project Environmental Scientist	\$115
Senior Designer	\$160
Designer	\$120
Senior Technician	\$110
Technician	\$100
Senior Construction Specialist	\$150
Construction Specialist	\$120
Administrative Staff	\$120
Intern	\$70

#	1411799247 (RFP) CCNA General Engineering Services For Electric Distribution						
	Vendor Rankings	Evaluator A	Evaluator B	Evaluator C	Σ Rank	Rank	Total Score
1	Chen Moore & Associates	2	1	2	5	2	256.36
2	EC Fennell	8	8	8	24	8	181.18
3	Enercon	5	4	7	16	5	222.66
4	GAI Consultants	4	5	3	12	4	245.00
5	KCI Technologies	7	6	5	18	6	208.20
6	Leidos Engineering	6	7	6	19	7	207.48
7	Pickett & Associates, Inc	1	2	1	4	1	262.79
8	Power Engineers	2	2	4	8	3	242.07
9	TRC Engineers	9	9	9	27	9	160.61
#	Evaluator A	Staff Experience (45 Points)	Company Experience (50 Points)	JSEB (5 Points)		Total	Rank
1	Chen Moore & Associates	43.91	45.00	4.00		92.91	2
2	EC Fennell	28.09	45.00	0.00		73.09	8
3	Enercon	37.91	47.50	4.00		89.41	5
4	GAI Consultants	43.36	45.00	4.00		92.36	4
5	KCI Technologies	37.91	37.50	0.00		75.41	7
6	Leidos Engineering	39.00	47.50	0.00		86.50	6
7	Pickett & Associates, Inc	44.18	47.50	4.00		95.68	1
8	Power Engineers	43.91	45.00	4.00		92.91	2
9	TRC Engineers	21.27	37.50	5.00		63.77	9
	Evaluator B	Staff Experience (45 Points)	Company Experience (50 Points)	JSEB (5 Points)		Total	Rank
1	Chen Moore & Associates	43.09	50.00	4.00		97.09	1
2	EC Fennell	31.64	40.00	0.00		71.64	8
3	Enercon	38.18	50.00	4.00		92.18	4
4	GAI Consultants	41.73	46.25	4.00		91.98	5
5	KCI Technologies	38.45	50.00	0.00		88.45	6
6	Leidos Engineering	38.73	40.00	0.00		78.73	7
7	Pickett & Associates, Inc	43.09	46.25	4.00		93.34	2
8	Power Engineers	43.09	46.3	4.00		93.34	2
9	TRC Engineers	25.36	37.5	5.00		67.86	9
	Evaluator C	Staff Experience (45 Points)	Company Experience (50 Points)	JSEB (5 Points)		Total	Rank
1	Chen Moore & Associates	37.36	25.00	4.00		66.36	2
2	EC Fennell	26.45	10.00	0.00		36.45	8
3	Enercon	30.82	6.25	4.00		41.07	7
4	GAI Consultants	37.91	18.75	4.00		60.66	3
5	KCI Technologies	28.09	16.25	0.00		44.34	5
6	Leidos Engineering	36.00	6.25	0.00		42.25	6
7	Pickett & Associates, Inc	42.27	27.50	4.00		73.77	1
8	Power Engineers	36.82	15.00	4.00		55.82	4
9	TRC Engineers	17.73	6.25	5.00		28.98	9
	Overall Averages	Staff Experience (45 Points)	Company Experience (50 Points)	JSEB (5 Points)		Total	Rank
1	Chen Moore & Associates	41.45	40.00	4.00		85.45	2
2	EC Fennell	28.73	31.67	0.00		60.39	8
3	Enercon	35.64	34.58	4.00		74.22	5
4	GAI Consultants	41.00	36.67	4.00		81.67	3
5	KCI Technologies	34.82	34.58	0.00		69.40	6
6	Leidos Engineering	37.91	31.25	0.00		69.16	7
7	Pickett & Associates, Inc	43.18	40.42	4.00		87.60	1
8	Power Engineers	41.27	35.42	4.00		80.69	4
9	TRC Engineers	21.45	27.08	5.00		53.54	9

**1411900647 APPENDIX B - BID FORM – Revised with finalized pricing (work items removed)
DISTRICT II (CEDAR BAY) WRF NEW PLANT ENTRANCE CONSTRUCTION**

Submit the Bid electronically as described in section 1.4 and 1.5 of the Solicitation.

Company Name: Petticoat-Schmitt Civil Contractors, Inc.

Company's Address: 8014 Bayberry Rd., Jacksonville, FL 32256

License Number: CGC #057651; CUC #1226048

Phone Number: (904) 751-0888 FAX No: (904) 751-0988 Email Address: ctofferi@petticoatschmitt.com

BID SECURITY REQUIREMENTS

- ☐ None required
☒ Certified Check or Bond (Five Percent (5%))

TERM OF CONTRACT

- ☐ One Time Purchase
☐ Annual Requirements
☒ Other, Specify - Project Completion

SAMPLE REQUIREMENTS

- ☒ None required
☐ Samples required prior to Bid Opening
☐ Samples may be required subsequent to Bid Opening

SECTION 255.05, FLORIDA STATUTES CONTRACT BOND

- ☐ None required
☒ Bond required 100% of Bid Award

QUANTITIES

- ☐ Quantities indicated are exacting
☒ Quantities indicated reflect the approximate quantities to be purchased Throughout the Contract period and are subject to fluctuation in accordance with actual requirements.

INSURANCE REQUIREMENTS

Insurance required

PAYMENT DISCOUNTS

- ☐ 1% 20, net 30
☐ 2% 10, net 30
☐ Other _____
☒ None Offered

ENTER YOUR BID FOR SOLICITATION 1411900647	TOTAL BID PRICE
Total Bid Price for the Project (transfer total from Bid Workbook)	\$321,613.00
Supplemental Work Allowance (SWA)	\$25,000.00
Total Bid Price for the Project Including the SWA	\$346,613.00

☒ **I have read and understood the Sunshine Law/Public Records clauses contained within this solicitation. I understand that in the absence of a redacted copy my proposal will be disclosed to the public "as-is".**

BIDDER CERTIFICATION

By submitting this Bid, the Bidder certifies that it has read and reviewed all of the documents pertaining to this Solicitation, that the person signing below is an authorized representative of the Bidding Company, that the Company is legally authorized to do business in the State of Florida, and that the Company maintains in active status an appropriate contractor's license for the work (if applicable). The Bidder also certifies that it complies with all sections (including but not limited to Conflict of Interest and Ethics) of this Solicitation.

We have received addenda

1 through 7


 Handwritten Signature of Authorized Officer of Company or Agent

3/14/25

Date

Charles Tofferi, Director
 Printed Name and Title

ADDENDUM 4 - APPENDIX B - BID WORKBOOK**District II WRF New Plant Entrance**

Instructions: Fill in all cells that are highlighted YELLOW. The quantities are determined by bidder and are not a guarantee of work. Quantities will be determined by bidder from JEA supplied engineered drawings.

	Unit	Quantity		Unit Cost		Total Cost (Monument Sign Removed)
Permits, Bonds, Builders Risk	LS	1	X	9400	=	\$ 9,400.00
General Conditions	LS	1	X	48972	=	\$ 48,972.00
Mobilization	LS	1	X	10000	=	\$ 10,000.00
Survey and As-Builts	LS	1	X	20000	=	\$ 20,000.00
Erosion Control / NPDES	LS	1	X	7200	=	\$ 7,200.00
Maintenance of Traffic	LS	1	X	5900	=	\$ 5,900.00
Clear and Grub	AC	0.1	X	26600	=	\$ 2,660.00
Removal of Existing Concrete	SY	360	X	16	=	\$ 5,760.00
Regular Excavation	CY	117	X	35	=	\$ 4,095.00
Embankment	CY	34	X	11.5	=	\$ 391.00
Type B Stabilization	SY	634	X	9.5	=	\$ 6,023.00
Optional Base, Base Group 06	SY	594	X	33	=	\$ 19,602.00
2.0" Superpave Asph Conc, Traf C, PG 76-22	TN	67	X	430	=	\$ 28,810.00
Concrete Curb, 18" Miami Curb	LF	60	X	94	=	\$ 5,640.00
Fencing, Type B, 6.1-7.0', W/ Barb Wire ATTMT (Removed by JEA)	LF	0	X	0	=	\$ -
Fence Gate, Type B, Sliding/Cantilever, 20.1-24' Opening (Removed by JEA)	EA	0	X	0	=	\$ -
Sod	SY	1356	X	10	=	\$ 13,560.00
Landscaping hose connection & fittings	EA	1	X	19000	=	\$ 19,000.00
Stainless Electrical Enclosure (n/a per addendum 4)	EA	0	X	0	=	\$ -
30 kVA NEMA 3R XFMR	EA	1	X	11000	=	\$ 11,000.00
50A/3P Breaker MCC	EA	1	X	3600	=	\$ 3,600.00
50A/3P NEMA 4X ECB	EA	1	X	11500	=	\$ 11,500.00
125A, 208Y/120V, 30 Space Panel (Removed by JEA)	EA	0	X	0	=	\$ -
125A Underground Feeder	FT	180	X	125	=	\$ 22,500.00
20A Branch Circuits	FT	140	X	50	=	\$ 7,000.00
Concrete Hand Holes (Removed by JEA)	EA	0	X	0	=	\$ -
Light Fixtures and Controls	LS	1	X	23000	=	\$ 23,000.00
Concrete Bollard	LS	0	X	0	=	\$ -
Monument Sign (Removed by JEA)	LS	0	X	0	=	\$ -
Misc, Wire Nuts, wire lub, etc.	LS	1	X	3600	=	\$ 3,600.00
Telecomm	LS	1	X	15200	=	\$ 15,200.00
Security	LS	1	X	17200	=	\$ 17,200.00
				GRAND TOTAL		\$321,613.00

Transfer the Grand Total for the project to Appendix B - Bid Form

Award #9 Supporting Documents 03-27-2025

ADDENDUM 4 - APPENDIX B - BID WORKBOOK District II WRF New Plant Entrance

Instructions: Fill in all cells that are highlighted YELLOW. The quantities are determined by bidder and are not a guarantee of work. Quantities will be determined by bidder from JEA supplied engineered drawings.

	Unit	Quantity		Unit Cost		Total Cost (Monument Sign Removed)	Total Cost (excluded workbook lines for award)
Permits, Bonds, Builders Risk	LS	1	X	9400	=	\$ 9,400.00	\$9,400.00
General Conditions	LS	1	X	48972	=	\$ 48,972.00	\$48,972.00
Mobilization	LS	1	X	10000	=	\$ 10,000.00	\$10,000.00
Survey and As-Builts	LS	1	X	20000	=	\$ 20,000.00	\$20,000.00
Erosion Control / NPDES	LS	1	X	7200	=	\$ 7,200.00	\$7,200.00
Maintenance of Traffic	LS	1	X	5900	=	\$ 5,900.00	\$5,900.00
Clear and Grub	AC	0.1	X	26600	=	\$ 2,660.00	\$2,660.00
Removal of Existing Concrete	SY	360	X	16	=	\$ 5,760.00	\$5,760.00
Regular Excavation	CY	117	X	35	=	\$ 4,095.00	\$4,095.00
Embankment	CY	34	X	11.5	=	\$ 391.00	\$391.00
Type B Stabilization	SY	634	X	9.5	=	\$ 6,023.00	\$6,023.00
Optional Base, Base Group 06	SY	594	X	33	=	\$ 19,602.00	\$19,602.00
2.0" Superpave Asph Conc, Traf C, PG 76-22	TN	67	X	430	=	\$ 28,810.00	\$28,810.00
Concrete Curb, 18" Miami Curb	LF	60	X	94	=	\$ 5,640.00	\$5,640.00
Fencing, Type B, 6.1-7.0', W/ Barb Wire ATTMT	LF	17	X	61	=	\$ 1,037.00	\$0.00
Fence Gate, Type B, Sliding/Cantilever, 20.1-24' Opening	EA	1	X	9600	=	\$ 9,600.00	\$0.00
Sod	SY	1356	X	10	=	\$ 13,560.00	\$13,560.00
Landscaping hose connection & fittings	EA	1	X	19000	=	\$ 19,000.00	\$19,000.00
Stainless Electrical Enclosure (n/a per addendum 4)	EA	0	X	0	=	\$ -	\$0.00
30 kVA NEMA 3R XFMR	EA	1	X	11000	=	\$ 11,000.00	\$11,000.00
50A/3P Breaker MCC	EA	1	X	3600	=	\$ 3,600.00	\$3,600.00
50A/3P NEMA 4X ECB	EA	1	X	11500	=	\$ 11,500.00	\$11,500.00
125A, 208Y/120V, 30 Space Panel	EA	1	X	17200	=	\$ 17,200.00	\$0.00
125A Underground Feeder	FT	180	X	125	=	\$ 22,500.00	\$22,500.00
20A Branch Circuits	FT	140	X	50	=	\$ 7,000.00	\$7,000.00
Concrete Hand Holes	EA	7	X	750	=	\$ 5,250.00	\$0.00
Light Fixtures and Controls	LS	1	X	23000	=	\$ 23,000.00	\$23,000.00
Concrete Bollard	LS	11	X	3300	=	\$ 36,300.00	\$0.00
Monument Sign (removed by JEA)	LS	0	X	0	=	\$ -	\$0.00
Misc, Wire Nuts, wire lub, etc.	LS	1	X	3600	=	\$ 3,600.00	\$3,600.00
Telecomm	LS	1	X	15200	=	\$ 15,200.00	\$15,200.00
Security	LS	1	X	17200	=	\$ 17,200.00	\$17,200.00
GRAND TOTAL						\$391,000.00	\$321,613.00 Total with workbook lines removed
Transfer the Grand Total for the project to Appendix B - Bid Form							\$346,613.00 Award Total with workbook lines removed and \$25K SWA added

Award #10 Supporting Documents 03-27-2025

Appendix B - Bid Form for One-Time Inventory Purchases 1411934848 TRAPF006 - One-Time Purchase for JEA Inventory

Submit the Bid electronically as described in the Solicitation.

Company Name: VanTran Transformers
Company's Address: 774 Imperial Dr. Waco TX 76712
License Number (if applicable) _____
Phone Number _____ EMAIL Address: Sales@vantran.com

Please quote prices for items described in specific unit of measure and furnish information requested. Freight to be included in the unit cost, FOB destination unless otherwise specified by Respondent. Please notate Manufacturer and Manufacturer Part Number (where applicable) in Quote. Lead time is defined as the number of days from receipt of order to delivery of material on site. JEA accepts electronic invoices from Vendors offering discounted early payment terms.

This is not a Purchase Order. Form must be signed, or quote may be rejected. Basis of Award: Unless otherwise stated, JEA intends to award based on lowest total cost.

By submitting this form, Respondent is affirming that they comply with all JEA and City of Jacksonville ordinances, policies and procedures regarding ethics and they have not been convicted of a public entity crime as listed on the Convicted Vendor list maintained by the Florida Department of Management Services.

JEA Reserves the Right:

To reject any Quote and instead award to a non-lowest cost Respondent in the instance a disproportionate amount of lead-time to cost exists. To revise to mutually agreed upon terms with the awarded Respondent in advance of PO issuance.

To reject any responses that JEA deems is not in compliance with JEA standards or not in the best interests of JEA.

To accept or decline all or part of this Request for Quote. To reject any Respondent whose Contract with JEA was terminated for default within the last two (2) years.

Line 1 Description	Location	Quantity	U/M	Unit Price	Ext Price	Lead Time After Receipt of Order
TRAPF006 TRANSFORMER, 3750KVA, 13200Y/7620 VOLT PRIMARY, 4160Y/2400 VOLT SECONDARY, 3-PHASE, PADMOUNTED, STEPDOWN, (DELIVERY TO BE SCHEDULED 72 HOURS IN ADVANCE OF ARRIVAL, WITH 2325 EMERSON ST. JAX. FL 32207).	JEA, SSC Storeroom	2	EACH	180,300	360,600	32-34 weeks after approval & release

Award #10 Supporting Documents 03-27-2025

Appendix B - Bid Form for One-Time Inventory Purchases
1411934848 TRAPF006 - One-Time Purchase for JEA Inventory

--- The following manufacturers are approved: ABB Eaton VanTran See Technical Specifications	Vendor Comments:
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☒ I have read and understood the Sunshine Law/Public Records clauses contained within this solicitation. I understand that in the absence of a redacted copy my proposal will be disclosed to the public "as-is".

Respondent's Certification

By submitting this Response, the Respondent certifies that it has read and reviewed all of the documents pertaining to this Solicitation, that the person signing below is an authorized representative of the Respondent's Company, and that the Company is legally authorized to do business in the State of Florida. The Respondent also certifies that it complies with all sections (including but not limited to Conflict Of Interest and Ethics) of this Solicitation, and that the Respondent is an authorized distributor or manufacturer of the equipment as required in this Solicitation.

We have received addenda

_____ through _____

Richard Auerneck 3/24/25
Handwritten Signature of Authorized Officer of Company or Agent Date

Richard Auerneck
Printed Name and Title

GENERAL

THE MINIMUM QUALIFICATIONS SHALL BE SUBMITTED ON THIS FORM. IN ORDER TO BE CONSIDERED A QUALIFIED BIDDER BY JEA YOU MUST MEET THE MINIMUM QUALIFICATIONS LISTED BELOW, AND BE ABLE TO PROVIDE ALL THE SERVICES AND MATERIALS LISTED IN THIS SOLICITATION.

THE RESPONDENT MUST COMPLETE THE RESPONSE INFORMATION SECTION BELOW AND PROVIDE ANY OTHER INFORMATION OR REFERENCE REQUESTED. THE RESPONDENT MUST ALSO PROVIDE ANY ATTACHMENTS REQUESTED WITH THIS MINIMUM QUALIFICATIONS FORM.

BY SIGNING THIS FORM, THIS IS YOUR CONCURRENCE THAT YOU MEET MINIMUM QUALIFICATIONS FOR SUBMISSION OF A RESPONSE.

RESPONDENT INFORMATION

COMPANY NAME: VanTran Transformers

BUSINESS ADDRESS: 7711 Imperial Dr. Waco TX 76712

CITY, STATE, ZIP CODE: _____

TELEPHONE: _____

E-MAIL: Sales@vantran.com

PRINT NAME OF AUTHORIZED REPRESENTATIVE: Richard Aubrecht

SIGNATURE OF AUTHORIZED REPRESENTATIVE: [Signature]

NAME AND TITLE OF AUTHORIZED REPRESENTATIVE: Regional Sales Manager

MINIMUM QUALIFICATIONS FOR SUBMISSION

Respondent must meet the following Minimum Qualifications to be considered eligible to have its Response evaluated by JEA. Respondent must complete and submit the Minimum Qualification Form provided in this Solicitation.

JEA will reject Responses from Respondents not meeting all of the following Minimum Qualifications:

- I. The Respondent must be the approved manufacturer or authorized distributor of the items listed in the Appendix Response Workbook. Approved manufacturers for JEA are found in the Appendix B Response Workbook.
- II. The Respondent must be able to meet all the specifications listed in Appendix A – Technical Specifications of this Solicitation. Respondent will annotate any proposed changes to the Technical Specifications and must have those changes approved by JEA before submitting bid.
- III. The Respondent must provide a lead-time as part of the information entered into Appendix B – Response Workbook. Delivery must be made on or before September 15, 2025.
- IV. The Respondent is not on the State of Florida Convicted Vendor List, State of Florida's Suspended Vendor List, The City of Jacksonville's Disqualified Vendor List, have not had their bidding privileges actively suspended by JEA, been debarred by JEA, or have had a contract with JEA terminated for default within the last two (2) years.

The following manufacturers are approved:

ABB

Eaton

VanTran

See attached Technical Specifications for additional details.



VENDOR CONFLICT OF INTEREST DISCLOSURE FORM INSTRUCTIONS

Vendors shall not try to gain an unfair competitive advantage or influence the ability of JEA officers and employees to make impartial and objective decisions on behalf of JEA.

All vendors interested in conducting business with JEA must complete and return the Vendor Conflict of Interest Disclosure Form found on the following page in order to be eligible to be awarded a contract with JEA. Please note that all vendors are subject to comply with JEA's conflict of interest policies provided below.

1. No JEA officer (e.g., JEA Board member and elected City official) or employee has an ownership interest of more than 5% in vendor's company.
2. No JEA officer or employee is an officer, director, partner or proprietor of vendor's company.
3. No JEA officer or employee is employed by or being considered for employment by vendor's company.
4. No JEA officer or employee work as a consultant or has a contractual relationship with vendor's company.
5. No JEA officer or employee will derive a personal financial gain or loss from this contract.
6. No relative of a JEA officer or employee will derive a personal financial gain or loss from this contract. (Relatives include a father, mother, son, daughter, husband, wife, brother, sister, father-in-law, mother-in-law, son-in-law, or daughter-in-law.)

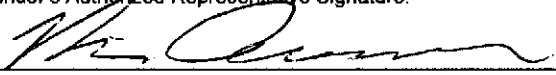
If a vendor has one or more relationships with a JEA officer or employee or a relative of a JEA officer or employee that meets the criteria described above, then the vendor shall disclose the information by completing the Conflict of Interest Form on the following page.



CONFLICT OF INTEREST DISCLOSURE FORM

Disclosing a potential conflict of interest does not disqualify vendors. In the event vendors do not disclose potential conflicts of interest, and they are detected by JEA, vendor may be **disqualified** from doing business with JEA.

Questions about this form? Contact (JEA, fill in the blank)

JEA Bid/Solicitation/Contract Number: 1411934848 TRAPF006	Name of JEA Employee(s) Working on Vendor's Current Contract(s) with JEA: Lynn Rix	
Vendor Name: Vantran Transformers	Vendor Phone:	
Vendor's Authorized Representative Name and Title: Richard Querswert, Regional Sales Mgr.	Authorized Representative's Phone: 919-272-0915	
NAME(S) OF JEA EMPLOYEE(S) / PUBLIC OFFICER(S) WITH POTENTIAL CONFLICT OF INTEREST		
Name of JEA public officer(s), employee(s), or relatives with whom there may be a potential conflict of interest. If more than five, attach a second form.	Relationship of JEA public officer(s)/employee(s) and/or relative(s) to vendor's company from list above (e.g. 1(a), 2, etc.). Please list all that apply:	
1.		
2.		
3.		
4.		
5.		
<input checked="" type="checkbox"/> Vendor has no conflict of interest to report. <input type="checkbox"/> Vendor hereby declares it has not and will not provide gifts or hospitality of any dollar value or any other gratuities to any JEA officer or employee to obtain or maintain a contract. <input type="checkbox"/> I certify that this Conflict of Interest Disclosure has been examined by me and that its contents are true and correct to my knowledge and belief and I have the authority to so certify on behalf of the Vendor.		
Vendor's Authorized Representative Signature: 		Date: 2/24/25

FOR JEA USE ONLY IF CONFLICT NOTED
This form has been reviewed by:

Name of JEA Ethics Officer:	Signature:	Date:
Note:		