# Welcome to the

# **JEA**. Awards Meeting

March 20, 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 <u>JEA.com</u>, 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 Sarah Millsap by telephone at (904)776-4311 or by email at millse@jea.com if you experience any technical difficulties during the meeting.

### JEA Awards Agenda March 20, 2025

# 225 North Pearl St., Jacksonville, FL 32202 - Board Room 1st Floor <u>Teams Meeting Info</u>

## **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 A

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 Participa (Y/N) If Y, then company name (%, \$ - awarde
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
	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			
	Last awarded: 08/22/202 For additional informati	24 ion contact: Marline McDonald										
	This contract increase co	overs Phase 2 of Engineering Design for th	e Northwest Water Ro	eclamation Facility (WRF) Project.								
	encompasses the develo	opment of a master development plan for the case. The Phase 1 award included preliminary	ne future expansion of recommendations for	the plant site, which will ultimately support	rt a capacity of at least 9 MGD, with basis of technical memoranda docum	total buildout capacity to be determined. Pl	nase 1 of the project received initi	ial approval in August 2024. Howev	l, located within JEA's northwest service area. Additionally, the project ver, due to an accelerated timeline, the scope of work is being updated to align with luence the engineering scope in subsequent phases. The revised portions of Phase		Project Completion	Y Four Waters Engineer Civil (\$1,461,815.00, Smith Surveying, I
2	1. WRF Studies, Design	onsists of the following: n, Permitting, Early Work Packages, and G ed the preliminary basis of Technical Mem			l loads, BioWin modeling, reject sto	rage strategy, onsite influent pump station, l	oiosolids, and overall site planning	g and layout) in the amount of \$2,42	22,299.00, and was Awarded on August 2024.	N/A	Start Date: 12/04/2024 End Date: 12/31/2029	Survey/SUE (\$192 1.7%) Alpha Envirotech Co Inc - Environmo
	Phase 2 includes detaile	ed design (e.g., drawings, specifications, cal	lculations, site survey,	, tree survey, ERP permit application, inter	face with CMAR contractor, opinion	n of probable cost estimates); an increase of	\$10,594,062.00					(\$108,854.00, 0.9
	2. Effluent Management Fee: \$518,330.00											
	Fee: \$214,810.00	sign, Permitting, and Bidding										
	Total for Phase 2: \$11,3											
	The hourly rates are con	<u> </u>		ved by JEA project staff and deemed reason	nable compared to past JEA projects.							
	Request for Proposal (RFP) CCNA	1411799247 (RFP) CCNA General Engineering Services For Electric	Erixton	Pickett & Associates, Inc	Capital	\$750,000.00	\$450,000.00	N/A	\$450,000.00			
	(MIT) CENA	Distribution		Chen Moore and Associates Inc			\$300,000.00		\$300,000.00			
3	Advertised: 07/24/2024 Opened: 08/27/2024 Nine (9) Responses Rec Public Evaluation Meet Pickett & Associates Chen Moore & Asso Power Engineers - 3 GAI Consultants - 4 Enercon - 5 Leidos Engineering - KCI Technologies - 6 EC Fennell - 8 TRC Engineers - 9	ceived ring: 01/29/2025 s - 1 pociates - 2  - 6 7  fon contact: Jason Behr	ing and engineering s	ervices in support of JEA's electric distribu pects of engineering design from the genera			ne solicitation stated JEA intended	d to award two contracts for these se	to offer creative and cost-effective ideas and solutions which may involve new ervices and is being awarded to the top two evaluated vendors. Rates received were	N/A	Three (3) Years w/ Two (2) - 1 Yr. Renew Start: 04/01/2025 End: 03/31/2028	Pickett: Meskel and Asso Engineering, PLLo Durden Surveyin Mapping - 59 Chen Moore Meskel and Asso Engineering PLLo VIA Consulting Serv 5%
	JEA is seeking an engin technology and a choice Proposals were evaluate	e of approaches to problems. Engineer's wo	rk may include all asperience, and JSEB par					nge as projects are assigned to the re	respective supplier.			
	JEA is seeking an engin technology and a choice Proposals were evaluate	e of approaches to problems. Engineer's wo	rk may include all asperience, and JSEB par			sage total award; however, as future projects a	rise, this percentage split will char	\$4,309,144.40	\$5,138,188.63			
4	JEA is seeking an engin technology and a choice Proposals were evaluate comparable to current si	e of approaches to problems. Engineer's worlded based on staff experience, company experimilar contracts that both vendors have with 138-19 ITN Concreate Manholes for JEA Inventory Stock	rk may include all asperience, and JSEB parn JEA and are deemed	d reasonable. The award amount split is bas	sed on a 60% / 40% distribution of the	ne total award; however, as future projects a			\$5,138,188.63	05/28/2024 - \$430,914.44	Five (5) Years w/ No Renewals Start Date: 04/28/2020	N

Request for Proposa (RFP)	al 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		
Switchgear Power For additional informa JEA is replacing the n Georgia Street scope of west switchgear will r amps minimum. New College Street scope of	Received eeting: 02/13/2025 Systems Inc \$12,292,522.00 Systems, LLC - \$11,487,970.00 nation contact: Jason Behr metal clad switchgear lineup and switchgear before work is the construction of fifteen (15) ne not have a separate source breaker). This desired work is the replacement of two existing systems.	w metal enclosed brign will allow all of isting T2 feeders should be writchgears, and additional transfer of the control of th	the circuits to be fed by the T1 or T2; or half fed by the T1 all be relabeled 95-99. Breaker 13T2T1 shall be relabeled 1 ion of one new switchgear in two existing buildings. The switchgear in two existing buildings.	e T1 & T2 transformers with the and half fed by the T2. Each not 13T2T3.  vitchgear manufacturer will als	new switchgear bus and all non-fe	eeder breakers shall be rated for 3,000 amps makes shall be rated for 3,000 amps makes segregated, 3000 Amp rated Bus Duct. Manual	ninimum. Bus tie cond	vill consist of bus tie breakers, five (5) feeder breakers and one (1) source breaker (the ductors will be rated for 2,450 amps minimum. Feeder breakers must be rated for 1200 ace existing non-segregated 2000A bus duct with 3000A rated duct.	N/A	Project Completion Start Date: 04/04/2025 End Date: 12/31/2026
			ence, and design approach and workplan. Powell Electrical Soft having one supplier, but also build relationships with both					itchgear Power Systems, LLC was the second highest evaluated and is being awarded		
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		
This is a private development of the Villages of West 12,192 feet. The proposed of the development of the de	red (by Developer) nation contact: David King elopment project where JEA has identified in District 2/Cedar Bay Sewer Basin.  tport Offsite Force Main project is generally bosed length of 12-inch force main infrastruct ment, needed to be upsized to a 20-inch force allowed JEA procurement directives by advertigation of the contact of t	ocated in northwest are required to mee main. The amount ising and awarding	Duval County. This area of Duval County has experienced the needs of the development of 12,660 feet, results in a proof cost participation is the difference between the bid for the	significant development intere ercentage of force main eligible e base infrastructure (12") and ised, and a pre-bid meeting wa	est in the last several years. Base le for reimbursement for transmis the bid for the upsized infrastructus held on 2/15/2024. Three biddens	ed on the projected build out of Villages of W ssion of 96.3%. Additionally, JEA Planning de cture (20") in addition to 31% of the 12-inch the ders attended the prebid meeting. Jax Dirtwork	estport, a total of 100 etermined that the 12- transmission line, red	Testport Development which will total 1000 single family residential units. This project 0 residential units, the maximum length of transmission main for JEA participation is einch force main infrastructure that was determined to be the required size to meet the uced by the 0.963 to account for the eligible reimbursement amount for transmission.	N/A	Project Completion Start Date: 01/15/2025 End Date: 06/30/2026
Invitation for Bid (IFB)		T .		nventory	\$500,000.00		\$360,600.00	\$360,600.00		
Wesco Distribution For additional information The purpose of this so JEA Item Number TR QUANTITY: 2	rmers - \$360,600.00 (quoting Van Tran) - Le on, Inc \$529,797.44 (quoting ABB) - Lead nation contact: Lynn Rix olicitation is to evaluate and select a vendor t RAPF006	Fime 68 weeks  o provide the item of	lescribed in this Solicitation at the best value to JEA.	VN, (DELIVERY TO BE SCH	HEDULED 72 HOURS IN ADV	VANCE OF ARRIVAL, WITH 2325 EMERS	SON ST. JAX. FL 32:	207). The following manufacturers are approved: ABB, Eaton, and VanTran	N/A	Project Completion Start Date: 04/03/2025 End Date: 11/21/2025
This is not a common	nly used transformer and hasn't been purchase	d by JEA in the pas	t, however, two are needed for the Hogan Chiller Plant. The	e lowest responsible bidder is 3	32% or \$139,400.00 lower than t	the business estimate and 38% lower than the	next bidder. This is o	leemed reasonable.		
Contract Increase/Ratificatio	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 Ai	Nexair LLC - \$2,240,000.00 rgas USA LLC - \$280,000.00	Nexair LLC - \$2,240,000.00 Airgas USA LLC - \$1,178,518.61		
The purpose of this solution.  This was originally away.  Amendment 1.  While there have been  This contract is split be	ation contact: Jason Behr  plicitation is to supply industrial and laboratory  varded to three vendors. After evaluations, Nex  n allowable price adjustment increases, this con  petween two internal tracking mechanisms in O	air was awarded the tract is being increase racle. One is a Blank	sed mainly due to the increased demand for this service from A	heson Tri-Gas Inc was awarded Airgas. This increase accounts for	Bulk CO2 and Airgas USA LLC votor \$390,000 of requested increase ase Agreement is no longer used b	was awarded bottle service. During contracting and is the projected amount to make it to cont by the business unit. JEA executed a 10% admin	phase, Matheson was ract term.	not agreeable to terms so their portion of the contract was awarded to Airgas in his contract for \$53,500 back in May 2024. The Contract Purchase Agreement was	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
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		
Three (3) Responses Petticoat-Schmitt (Auld & White CorkBT Contracting (For additional information and The purpose of this In Road, which is primar current JEA traffic that	Received: Civil Contractors, Inc. \$458,000.00 (\$346,6) Instructors, LLC \$459,100.00 (\$392,6) Corp \$605,150.00 (\$517,4) Ination contact: Halley Stewart Invitation for Bid (IFB) is to select a supplier urily a residential street. In response to recent at passes through the residential neighborhood	13.00 final pricing v 00.00 final pricing v 59.00 final pricing v to provide construct customer complaint d.	with six (6) workbook lines removed) with six (6) workbook lines removed)  ion services for a new entrance driveway for District II (Ce s and public feedback at the JEA Board meeting, a new entrance driveway for District II (Ce s and public feedback at the JEA Board meeting, a new entrance driveway for District II (Ce s and public feedback at the JEA Board meeting, a new entrance driveway for District II (Ce s and public feedback at the JEA Board meeting, a new entrance driveway for District II (Ce s and public feedback at the JEA Board meeting, a new entrance driveway for District II (Ce s and public feedback at the JEA Board meeting).	dar Bay) Water Reclamation France has been designed throug	gh the nearby Imeson Industrial C	Complex. This new route will provide exclusi	ve access for JEA vel	al Complex. The primary access to the District II (Cedar Bay) WRF is via Cedar Bay nicles and will not be open to the public. The new entrance will help alleviate the	N/A	Project Completion Start Date: 03/24/2025 End Date: 07/07/2025

	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			
	JEA is seeking qualifieguidelines. Specific tas  1. Onsite System Inspe 2. CCTV Inspections: 3. Water Sampling and 4. Control Systems Ass 5. Data Analysis and T 6. Detailed Reporting: 7. Workshops and Coo After the public evalua	Received eting: 04/04/2024 Inc 1 associates - 2 3 tion contact: Dan Kruck ed firms to provide engineering and consultings are listed below (but not limited to): ections: Evaluating above-ground facilities, in Conducting Closed Circuit TV (CCTV) instant Testing: Performing tests at various system seessment: Inspecting control instrumentation echnical Evaluations: Reviewing and compiler Preparing utility system inspection reports to ordination/Stakeholder Engagement: Particip	ncluding treatment plants pections of gravity waster points, particularly for be n, water/wastewater telec ling data, conducting sur- hat include life expectance ating in workshops and co	s, water wells, storage tanks, hydrants, water collection lines and laterals, bas elow-ground assets.  om infrastructure (e.g., wireless, fiber veys and geotechnical investigations, acy estimates, critical needs, and technical conference calls to discuss draft reports	, lift stations, and related assets. sed on historical records, asset managements, SCADA, AMI, and HMI systems), and and creating or reviewing as-built drawin ical findings. s, gather feedback, and finalize deliverab	ent data, and staff input.  other related systems. gs.  les. Developing presentations and atte	ending meetings with various stakeholde	rs, including senior leadership and p	ets will be awarded on a per-project basis, adhering to Florida's CCNA public groups.  ased via CPI annually. The proposed hourly rates were reviewed by JE		Three (3) years w/Two (2) - 1 Yr. Renewals Start Date: 04/01/2025 End Date: 03/31/2028	N
	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			
	Advertised: 11/15/2023 Opened: 01/09/2024 One (1) Responses Red Public Evaluation Mee EN Engineering, LI	ceived eting: 04/03/2024 LC - 1										
	The scope of work incl	tion contact: Dan Kruck ludes providing engineering and consulting s sks are listed below (but not limited to):	services for inspecting and	d assessing electric utility infrastructu	re. These services will support condition	assessments and related analyses for p	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	N/A	Three (3) years w/Two (2) - 1 Yr. Renewals Start Date: 04/01/2025 End Date: 03/31/2028	N
	<ul><li>2. Control Systems Ins</li><li>3. Data and Technical A</li><li>4. Detailed Reporting:</li><li>5. Workshops and Coo</li></ul>	ent: Evaluating electrical system components spection: Inspecting and assessing control in Analysis: Collecting and analyzing data thro Preparing comprehensive inspection and coordination: Facilitating workshops and conferdeetings: Developing presentations and attentions	strumentation, utility tele ugh surveys, geotechnica ndition assessment repor- rence calls to review draft	com infrastructure (e.g., wireless and l investigations, and technical evaluati ts, including critical needs, life expect t reports, gather input, and finalize do	fiber communication systems), and systems, which may involve reviewing and cancy estimates, and technical findings. cuments based on feedback.	ms like SCADA, AMI, and metering. reating as-built drawings.						
		ation meeting on 04/03/2024 this contract ne e compared to current market conditions.	gotiation was placed on h	old until JEA leadership developed a	plan before proceeding with contract aw	ard. The task orders for this contract w	vill be based off of the negotiated hourly	rates, and those rates may be increa	ased via CPI annually. The proposed hourly rates were reviewed by JE	A staff		
							Consent Agenda	Action				
Committee Members in Attendance	Names											
Motion by:	rames			<u>,</u>			<u> </u>					
Second By:												
Committee Decision												

						Re	egular Agenda					
Award #	Type of Award	Solicitation # & Short Description/Title	VP	Awardee	Award Amount	<b>Business Unit Estimate</b>	Original Award Amount	New Not-to-Exceed	Amendments	Term	JSEB Participation (Y/N) If Y, then list company name(s) (%, \$ - awarded)	Action
1	These contracts were or that has been established	eeded to supplement the design process when ectric transmission engineering.  Iginally awarded for established projects and be for FY25/FY26. There have been no rate incorreceiving an increase at this time as Leidos a	JEA in-house engoudgets known at the creases outside of the	he time. The original award noted that we we he standard CPI allowable per the contract.	ould return to the Awards Committee for inc Γhe vendors selected are based on expertise	is increase is for a new project	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: Second by: Committee Decision:		
	DISCUSSION/ACTIO						4 I D I A -	1. 6				
						Consen	ı and Kegular Ag	enda Signatures				
Budget	Name/Title											
wards Chairman	Name/Title											
Procurement	Name/Title											
Legal	Name/Title											

### JEA Awards Agenda March 13, 2025

### 225 North Pearl St., Jacksonville, FL 32202 - Hydrangea 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 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. JSEB Participation (Y/N) If Y, then list **Original Award Solicitation # & Short** Term (Projected) Type of Award VP **New Not-to-Exceed** Award # Awardee **Funding Source Business Unit Estimate Award Amount Amendments** company name(s) Description/Title **Start Date - End Date** (%, \$ - awarded) N/A N/A N/A Minutes from 03/06/2025 Meeting N/A N/A N/A N/A N/A N/A N/A Minutes

\$5,177,234.60

\$6,605,252.00

**Invitation for Bid** 

Moved to regular agen	da as Item #3							End: 3/13/2026	Landscape Construction, LLC - \$91,016.46
Invitation For Bid (IFB)	1411924646 (IFB) CCCN Circuit 372 Addition - UG MH Conduit  Erixton	HEART UTILITIES OF JACKSONVILLE INC.	Capital	\$900,000.00	\$995,570.00	N/A	\$995,570.00		

N/A

\$5,177,234.60

N/A

N/A

Y - 7%

RZ Services - \$180,000.00

DJ Contracting of Jacksonville, Inc. - \$34,936.97

**Project Completion** 

Start: 5/10/2025

End: 3/13/2026

Project Completion Start Date: 03/31/2025

End Date: 08/01/2025

Date Advertised: 1/23/2025 Date Opened: 2/25/2025 Five (5) Bids Received Heart Utilities of Jacksonville Inc- \$995,570.00 SPE Utility Contractors. - \$1,219,000.00

1411906646 - Construction Services

for Cisco Drive to Garden Street 20-

Inch Water Main Project

Zammataro

Callaway Contracting, Inc.

Hypower LLC- \$1,455,634.00 The Fishel Company - \$1,506,310.86 Irby Construction Company - \$2,933,797.00

The purpose of this solicitation is to select a vendor to provide installation of less than 1 mile of underground distribution infrastructure, including manholes and duct bank system along the west side of POW-MIA Memorial Parkway. The Contractor shall provide all labor, supervision, equipment, and materials (except as otherwise noted). JEA will provide contractor with 10 precast concrete manholes, each including frames, covers, and extension rings. The list of PVC-related components includes coilable PE conduit (10,000 feet of 4" and 30,000 feet of 6") and additional 20' sections of 4 and 6" conduit, along with various PVC couplers, elbows, and plugs in sizes of 1", 4", and 6". Materials for manhole grounding consist of 30 threadless ground rods with clamps, 400 feet of soft-drawn #4 solid bare copper conductor, couplings, and bronze connectors. Additionally, the materials list includes 11 units of quick-set cement and 10 conduit/cable markers.

Capital

Since JEA installed the new 50 MVA T2 at the CCC North substation, JEA Operations has been using the spare 372 circuit breaker, the 26kV transfer bus, and the 378 feeder conductor (not the 378 breaker) to serve most of the Cecil 389 overhead circuit with extends west and east along Normandy Boulevard at POW-MIA Memorial Parkway. The CCCN T1 serves two circuits, 377 and 378, which were constructed mostly underground to provide high reliability and excellent power quality. JEA Operations has decided to make this change permanent. To free up the 26kV transfer bus and maintain the existing underground 378 breaker and feeder, a new 372 distribution feeder will be extended from the existing 372 spare breaker to the south side of Normandy Boulevard. An additional benefit for this project is that existing overhead 26kV primary conductors will be removed off the mostly underground 377 circuit and onto the new 372 circuit.

The award amount of \$995,570.00 is slightly higher than the budget estimate of \$900,000.00. The budget estimate was calculated based off the current unit price contract we have for these services that was executed in 2019 with yearly capped CPI increases. Taking this into account, the award amount is deemed reasonable.

	Consent Agenda Acti	ion
Committee		

Members in Ted Phillips, Jordan Pope, Ricky Erixton **Attendance** Names Jordan Pope Motion by: **Ricky Erixton** Second By:

Committee Approve award items 1 & 3; Move award item #2 to the Regular Agenda for discussion. Decision

						Regular Ager	ıda					
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
		Advertising and Public Relations (SJ&P) - 132.85/Blended Hourly Rate ngs:	Mooreland -\$135.95/Blended Ho	St. John and Partners Advertising and Public Relations	\$16,350,000.00	\$16,350,000.00	N/A	\$16,350,000.00				
1	3/5/2025-Final Rank/ For Additional Informati  JEA's public education s knowledge of how to ma Company Experience, Description	Scores/BAFO on Contact: Angel Love ervices will include marketing, communicating more efficiently their electric, water a sesign Approach, Collaboration, JSEB particular particular properties of the sesign Approach and the sesign Approach as the sesign Approach and the sesign Approach as the sesign Approach and the sesign Approach and the sesign Approach as	nd sewer utility services in the control of the con	d/or media buying. The company awarded the ces, and to inform them about how JEA mana two (2) responses received from St John and	ages those services for them and the coll Partners Advertising and Public Rela	ommunity. The RFP was evaluated based o tions and The Dalton Agency were shortling	n Quotation of Rates, Professi sted to participate in a Best an	ional Staff Experience, d Final Offer (BAFO) round.	N/A	Five (5) Years w/Two (2)-One (1) Year Renewals Start: 05/01/2025	Y- Accuity Designs Group Inc 1-3% of	Motion by: Jordan Pope  Second by: Ricky Erixton
	The request is based on a which make up an estima \$3,050,000.00, with an a	blended hourly rate and weighted usage p ted \$11,742,550.00 of the five (5) year awanticipated annual JEA usage increase of ap ands during the contract term, the business	ercentages for agency ard amount and are papproximately 3%, drive	on Meeting, scores and ranks from the evaluation Meeting, scores and ranks from the evaluation of costs for team members across multiple functions through costs to JEA. These categories reven by evolving service requirements. This problem of the	ctional disciplines which makes up \$4 epresent the comprehensive resources ojection is grounded in prior contract	,607,000.00 of the five (5) year award cost EA expects to utilize over the course of the data and accounts for the complexity and s	t. This request also includes Male contract. Projected costs for scale of planned activities. To	Iedia Buys and Outside costs the first year are estimated at further address potential	1.021	End: 04/30/2030	Agency Fees	Committee Decision: Approved
		•	•	to the prior contract's blended rate of \$126.	C		· / •					
	in the amount of \$16,350	0,000.00.		vas chosen over Dalton. The St. John Part								
	their proposal and a corratings. Moving forwar	nsistent history of collaboration spanning	g over a decade. The orehensive advertisir	e selection was influenced by various factors campaign across multiple channels—wh	ors, including design standards and	the quality of previous work, which high	nlighted significant disparities	s in the shortlisted firms'				
	Single Source	N00 Atomizing Air Compressor AB Replacement Project	Erixton	FS-Compression CO., LLC	\$1,129,442.00	\$6,605,252.00	N/A	\$1,129,442.00				
	The existing A and B c potentially leading to do remove dust and partic	erates or complete shutdowns. The Atomalate and then compress the air through	nizing Air System co three stages. Interco	luding recurrent failures to start and trips to onsists of three 50% capacity centrifugal a solers between each stage reduce air temperature.	ir compressors, each a three-stage userature and enhance efficiency. Con	unit designed to increase air pressure pro inpressor discharge is further cooled by a	ogressively. Compressors dra an aftercooler, which remove	w air through inlet filters to es additional moisture from				Motion by: Ricky Erixton
2	engineered systems, eq should a compressor is:  This OEM like-kind eq	uipped with a 4000V drive motor, two-sue occur.  uipment offers several key advantages, p	stage inlet filter, glycoarticularly in terms	of faster installation and project completic solutions that may require extensive modifications.	alarms, protections, and controllers	. Standard practice is to always operate aajor modifications to the existing infrast	two compressors to ensure utructure (piping, circuits, structure)	uninterrupted unit operation acture, etc.) are required,	N/A	Project Completion Start Date: 03/14/2025 End Date: 02/01/2026	N	Second by: Jordan Pope  Committee Decision:
	which would otherwise	extend downtime and add complexity to	the project.	rectly from the OEM, due to pressing relia			-					Approved
	which would increase of DISCUSSION/ACTION	ON: The decision for single sourcing wosts an extend the installation time and lon PARTICIPANTS: Ted Phillips, January 1411906646 - Construction Services	lead to longer outage ason Behr	, the OEM, is based on the need for quickes.	ker installation and minimal disruption	on. By selecting the OEM, we can avoid	d significant modifications to	the existing infrastructure,				
	(IFB)	for Cisco Drive to Garden Street 20- Inch Water Main Project		Callaway Contracting, Inc.	\$5,177,234.60	\$900,000.00	N/A	\$5,177,234.60				
	Ferreira Construction	25	07									Motion by:
3	J.B. Coxwell Contra T B Landmark Con United Brothers De Garney Companies Jax Utilities Manage	setting, Inc \$5,569,141.75 struction Inc - \$6,199,000.86 velopment Corp - \$6,598,414.07 Inc - \$6,671,493.40 ement, Inc \$8,525,256.67							N/A	Project Completion Start: 5/10/2025	Y - 7% RZ Services - \$180,000.00 DJ Contracting of Jacksonville, Inc	Jordan Pope  Second by: Ricky Erixton
	For more information of As growth continues in		en water treatment <sub>l</sub>	plants are needed to meet demands. This p	project provides an additional conne	ction between the Westlake WTP and tl	he North Grid to provide sup	pport during peak usage		End: 3/13/2026	\$34,936.97 Landscape Construction, LLC - \$91,016.46	Committee Decision:
	times.  The scope of work for	this project consists of the installation of	f 8,910 LF of 20-inc	ch WM, 205 LF of 6-inch WM, 60 LF of	12-inch WM by the open cut methor	od, and 397 LF of 24-inch water mains	by horizontal directional dril	ll method. The scope also				Approved
	includes removal/replace The Solicitation was co	rement of site, concrete, asphalt work, a	Il fittings, valves and 25, with eight respo	onses received. JEA has determined Callav	operable system.							
	amount to Callaway wi		cision aims to strean	uce the award amount for the project, as taline project execution by allowing the Citez, Christina Tucker	· · · · · · · · · · · · · · · · · · ·		_					
						Consent an	d Regular A	genda Signatur	es			
Budget	Name/Title	Stophanul M. Neally										
Awards Chairman	Name/Title	Theodore B Phillips		n hehalf of Jan	ny Macallus	<b>.</b> \						
Procurement  Legal		Lisa Pleasan Rebecca Lava		n behalf of Jen	THY IVICCUILUIT	' <i>)</i>						
Legal	1 (ame/ 1 fut											

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February 19, 2024 Via Email

Mickey Willoughby, PE **JEA** 225 N. Pearl St. Jacksonville, FL 32202

**Re:** JEA Northwest WRF

Scope of Work - Amendment 1

Dear Mr. Willoughby:

Please find enclosed three final scopes for Amendment 1 of the above referenced project.

- WRF Studies, Design, Permitting, Early Work Packages, GMP dated February 19, 2025, revised fee \$13,016,361; the WRF Studies, Design, Permitting, Early Work Packages, GMP scope and fee replaces the original WRF Preliminary Basis of Technical Memoranda scope and fee of \$2,422,299 authorized on JEA CONTRACT # JEA12018 dated December 4, 2024
- Effluent Management Study, dated January 8, 2025, fee \$518,330
- Exploratory Well Design, Permitting and Bidding, dated October 8, 2024, fee \$214,810

The total fee for the Northwest WRF suite of projects above is \$13,749,501.

The original PO authorized can be applied towards Amendment 1, resulting in a remaining PO deficient of \$11,327,202.

Thank you for the opportunity to serve the JEA on this important project. If you have any questions or need any additional information, please do not hesitate to contact me.

Very Truly Yours,

**Hazen and Sawyer** 

Andre Dieffenthaller, PE

Vice President

Enclosure

C: Peter Doherty, PE / JEA; Caitlin Klug, PE / Hazen

Award #2 Supporting Documents 03/20/2025

1411499846 Design Services for Northwest WRF Fee Estimate FINAL
2/5/25

1.1 Prepare sco 1.2 Prepare mo 1.3 Attend kick- 1.4 Weekly call 1.5 Coordinate 1.6 Manage sub 1.7 Develop Sha 1.8 Coordinate Expens  2 DATA COLL 2.1 Review and 2.2 Conduct site 2.3 Define flows 2.4 BioWin Mod 2.5 Evaluate inf 2.6 Define site   Expens  3 30% CONC 3.1 Prepare TM 3.2 Attend 2 in- 3.3 Prepare dra 3.4 Prepare dra 3.5 Attend in pc 3.6 Submit to Fi	TASK 1 LABOR FEE TASK 1 HOURS TASK 1 LUMP SUM DILLECTION, ASSESSMEN nd summarize data site visit DWS, loads, PF, create TM lodeling influent PS plan te planning/phasing, liquid	\$ 651,625.00 2,294	\$ 310 8 8 8 8 192 232 0 0 384 \$ 257,920 832 8 4 20 14 10 38	\$ 275 8 60 24 288 192 104 2 384 \$ 292,050 1,062 26 12 76 70 24	0 0 0 0 0 0 0 0 0 0	\$ 185 \$  0 0 0 0 0 0 0 0 0 0 \$ 0 \$ \$ \$ \$ \$ \$	0 0 0 0 0 0 0 0 0 0 0 0	24 0 24 48 192 0 4 0 4 0	0 0 0 0 0 0 0 0 0 0 0	\$ 165 0 0 0 0 0 0 0 0 0 0 0 0 0	0 24 0 0 0 0 0 4 80	1,040 9,360 1,535 0 0 3,120 0 21,300	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	40 92 56 528 616 104 9 848 9 5	\$ 9,080.00 \$ 31,100.00 \$ 13,975.00 \$ 145,440.00 \$ 151,600.00 \$ 31,720.00 \$ 1,570.00 \$ 255,140.00 \$ 12,000.00
1.1 Prepare sco 1.2 Prepare mo 1.3 Attend kick- 1.4 Weekly call 1.5 Coordinate 1.6 Manage sub 1.7 Develop Sha 1.8 Coordinate Expens  2 DATA COLL 2.1 Review and 2.2 Conduct site 2.3 Define flows 2.4 BioWin Mod 2.5 Evaluate inf 2.6 Define site   Expens  3 30% CONC 3.1 Prepare TM 3.2 Attend 2 in- 3.3 Prepare dra 3.4 Prepare dra 3.5 Attend in pa 3.6 Submit to Fi	cope and work plan monthly invoices, progress ck-off, EOR review scope all with JEA and Hazen te with JEA throughout pro sub-consultants SharePoint Site te with Project Team enses  TASK 1 LABOR FEE TASK 1 LUMP SUM DILECTION, ASSESSMEN nd summarize data site visit pws, loads, PF, create TM lodeling influent PS plan te planning/phasing, liquid enses	\$ 651,625.00 2,294	\$ 8 8 192 232 0 0 0 384 \$ 257,920 832 \$ 8 4 20 14 10	\$ 60 24 288 192 104 2 384 \$ 292,050 1,062  26 12 76 70	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0	0 24 48 192 0 4 0	0 0 0 0 0	0 0 0 0 0	24 0 0 0 0 4 80	9,360 1,535 0 0 3,120 0 21,300	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0 0 0 12,000	92	\$ 31,100.00 \$ 13,975.00 \$ 145,440.00 \$ 151,600.00 \$ 31,720.00 \$ 1,570.00 \$ 255,140.00 \$ 12,000.00
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2.2 Conduct site 2.3 Define flows 2.4 BioWin Mod 2.5 Evaluate inf 2.6 Define site	site visit ows, loads, PF, create TM lodeling influent PS plan te planning/phasing, liquid enses	/biosolid	4 20 14 10	12 76 70	8		8	16	0	0	0	1,560	4,955	0	0	0	0	0	0	0	74 9	\$ 23,305.00
2.3 Define flows 2.4 BioWin Mod 2.5 Evaluate inf 2.6 Define site p	ows, loads, PF, create TM lodeling influent PS plan te planning/phasing, liquid enses	/biosolid	20 14 10	76 70		0	8	0	0	0	0	5,040	0	0	0	0	0	0	0	2,000	32	\$ 23,303.00 \$ 14,700.00
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3 30% CONC 3.1 Prepare TM 3.2 Attend 2 in- 3.3 Prepare dra 3.4 Prepare 30% 3.5 Attend in pe 3.6 Submit to Fi	TASK 2 LABUR FEE	± 200 C00 00		- TE 000	46.000		52.460	2.240 +				÷ 25.440	52.000		45.000							b 200 500 00
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<ul> <li>3.1 Prepare TM</li> <li>3.2 Attend 2 in-</li> <li>3.3 Prepare dra</li> <li>3.4 Prepare 30%</li> <li>3.5 Attend in pe</li> <li>3.6 Submit to Fi</li> </ul>	TASK 2 LUMP SUM	030	- J1	270	72	0	321	10	0	00	0										330	\$ 308,680.00
<ul> <li>3.2 Attend 2 in-</li> <li>3.3 Prepare dra</li> <li>3.4 Prepare 30%</li> <li>3.5 Attend in personal Submit to Figure 3.6</li> </ul>	NCEPTUAL DESIGN DOC	CUMENT (CDD)																				
<ul><li>3.3 Prepare dra</li><li>3.4 Prepare 309</li><li>3.5 Attend in pe</li><li>3.6 Submit to Fi</li></ul>	ГМ	•	122	404	492	120	248	160	0	0	0	127,660	183,400	0	116,400	0	6,000	0	0	0	1,546	\$ 778,600.00
<ul><li>3.4 Prepare 309</li><li>3.5 Attend in pe</li><li>3.6 Submit to F</li></ul>	in-person meetings		8	24	24	0	0	40	0	0	0	8,210	0	0	0	0	0	0	0	2,000	96 9	\$ 30,290.00
3.5 Attend in pe	draft TM, submit		32	156	200	0	160	80	0	0	40	50,696	15,970	0	0	0	0	0	0	0	668	\$ 206,686.00
3.6 Submit to F	30% Drawings, Submit		224	1,200	960	400	320	160	800	1,600	160	61,544	31,330	0	0	0	0	0	0	0	5,824	\$ 1,247,114.00
	person review meeting, m	neeting minutes	6	18	18	0	2	14	0	0	0	7,980	3,900	0	0	0	0	0	0	2,000	58 9	\$ 27,030.00
			0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4 9	\$ 830.00
3.7 Respond to Expens	to FM Global		0	6	0	0	0	8	0	0	0	2,660	0	0	0	0	0	0	0	500	14 9	\$ 5,430.00 \$ 500.00
Lxpens	erises																			300	- 3	\$ 500.00
	TASK 3 LABOR FEE	\$ 2,296,480.00	\$ 121,520	\$ 497,750	\$ 381,150	\$ 96,200 \$	120,450 \$	64,960 \$	107,200	\$ 264,000	\$ 23,000	\$ 258,750	\$ 234,600	\$ -	\$ 116,400	\$ -	\$ 6,000	\$ -	\$ -	\$ 4,500	9	\$ 2,296,480.00
	TASK 3 HOURS	8,210	392	1,810	1,694	520	730	464	800	1,600	200									-	8,210	
	TASK 3 LUMP SUM			·						·					·							\$ 2,296,480.00
4 75% DESI	SIGN DOCUMENTS																					
	and Submit 75% Documen	its	580	2,120	1,600	1,600	1,200	600	1,200	2,800	160	149,962	302,995	0	180,900	0	8,000	0	0	0	11,860	\$ 2,983,857.00
	nd respond to FM Global		0	8	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	20 9	\$ 3,880.00
	MAR Construction Cost		8	48	0	0	0	0	0	0	0	2,996	10,890	0	0	0	0	0	0	2,000	56 9	\$ 29,566.00
4.4 Conduct 75° Expens	75% Review Meeting		6	18	18	U	2	14	0	0	0	4,410	3,900	0	0	0	0	0	0	500	58 9	\$ 23,460.00 \$ 500.00
Ехрепа	11303																			500		<del>р</del> 500.00
	TASK 4 LABOR FEE	\$ 3,041,263.00	\$ 184,140	\$ 603,350	\$ 364,050	\$ 296,000 \$	198,330 \$	87,640 \$	160,800	\$ 462,000	\$ 18,400	\$ 157,368	\$ 317,785	\$	\$ 180,900	\$	\$ 8,000	\$	\$	\$ 2,500	9	\$ 3,041,263.00
	TASK 4 HOURS	11,994	594	2,194	1,618	1,600	1,202	626	1,200	2,800	160									-	11,994	
	TASK 4 LUMP SUM																					\$ 3,041,263.00
	ESIGN DOCUMENTS																2	_		_		
	and Submit 100% Docume	ents	360	1,720	1,400	800	800	600	1,200	2,400	80	43,984	163,885	0	131,600	0	3,000	0	0	0	9,360	\$ 2,172,069.00
	nd respond to FM Global MAR Construction Cost		0 8	8	0	0	0	0	0	0	0	0	0 6,220	0	0	0	0	0	0	0	8 9	\$ 2,200.00 \$ 15,240.00
5.4 Review CMA			0	40	0	0	0	0	0	0	0	2,660 2,660	0	0	0	0	0	0	0	0	40 9	\$ 15,240.00 \$ 13,660.00
	100% Review Meeting		6	18	18	0	2	14	0	0	0	4,410	3,900	0	0	0	0	0	0	2,000	58	\$ 13,660.00
Expens			-			-	_			-		.,	2,222	-				-		0		ψ 25/100100
F 5775																						
	TASK 5 LABOR FEE	\$ 2,226,629.00	\$ 115,940	\$ 493,350	\$ 319,050	\$ 148,000 \$	132,330 \$	87,640 \$	160,800	\$ 396,000	\$ 9,200	\$ 53,714	\$ 174,005	\$ -	\$ 131,600	\$ -	\$ 3,000	\$ -	\$ -	\$ 2,000	9	\$ 2,226,629.00
	TASK 5 HOURS	9,494	374	1,794	1,418	800	802	626	1,200	2,400	80										9,494	
	TASK 5 LUMP SUM									-	1				1		,					\$ 2,226,629.00
	FOR CONSTRUCTION DO			200	200	266			200	200	40	0.202	77 5 45	2	50.200	•	2.000				1.044	
	and Submit IFC Documents MAR Construction Cost	S	64 0	280	0	260	0	0	200 0	0 0	40 0	9,308 3,640	77,545 4,140	0	59,300 0	0	3,000	0	0	0	1,844	\$ 502,493.00 \$ 7,780.00
Expens			U	U	U	U	U	U	U	U	U	3,040	4,140	U	U	U	U	U	U	0		φ /,/8U.UU
Lxpens																				U		
	erises	\$ 510,273.00	\$ 19,840	\$ 77,000	\$ 45,000	\$ 48,100 \$	- \$	- \$	26,800	\$ 132,000	\$ 4,600	\$ 12,948	\$ 81,685	\$ -	\$ 59,300	\$	\$ 3,000	\$ -	\$ -	\$ -		\$ 510,273.00
	TASK 6 LABOR FEE		64	280	200	260	0	0	200	800	40									-	1,844	
		1,844	04																			

Award #2 Supporting Documents 03/20/2025

1411499846 Design Services for Northwest WRF Fee Estimate FINAL
2/5/25

	Eulathia a	POSITION	Vice President	Senior	Associate	Senior	Principal	Fusinger	Senior	Principal	Secretary /	Weight Biggs	Four	Alpha Envirotech	GM	Smith	Distance I A	CAT	Universal	F	HOURS/T	TOTAL FEE/
	Exhibit 2	POSITION	Vice President	Associate	Associate	Principal Engineer	Engineer	Engineer	Designer	Designer	Office Support	Wright Pierce	Waters	Consulting, Inc.	Hill	Surveying Group	Pittman LA	GAI	Universal	Expenses	ASK	TASK
TASK		RATE	\$ 310	\$ 275	\$ 225	\$ 185	\$ 165	\$ 140	\$ 134	\$ 165	\$ 115											
	EARLY WORKS PACKAGE - CIVII	•																				
	Prepare EWP to Include Limited Dra	awings/Specifications	8	32	0	0	0	0	0	80	0	0	343,790	0	0	0	0	0	0	0	120	\$ 368,270.00
	Prepare Permit Applications		8	16	0	0	0	0	0	0	0	0	87,305	0	0	0	0	0	0	0	24	\$ 94,185.00
	Meetings		8	16	0	0	0	0	0	0	0	0	17,240	0	0	0	0	0	0	0	24	\$ 24,120.00
7.4	Submittals		8	16	0	40	0	0	0	0	0	0	48,510	0	0	0	0	0	0	0	64	\$ 62,790.00
	Expenses																			0		
	TASK 7 LABOR FEE TASK 7 HOURS TASK 7 LUMP SUM	\$ 549,365.00 232	\$ 9,920 32	\$ 22,000 80	\$ -	\$ 7,400 40	\$ -	\$ -	\$ -	\$ 13,200 80	\$ -	\$ -	\$ 496,845	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	232	\$ 549,365.00 \$ <b>549,365.00</b>
8	EARLY WORKS PACKAGE - LONG	LEAD ITEMS																				
	Prepare EWP to Include Specification	ons	32	56	80	80	0	80	0	80	24	0	0	0	0	0	0	0	0	0	432	\$ 85,280.00
	Meetings		8	16	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	\$ 10,160.00
8.3	Submittals		8	32	80	60	0	60	0	0	0	0	0	0	0	0	0	0	0	0	240	\$ 48,780.00
	Expenses																			0		
	TASK 8 LABOR FEE TASK 8 HOURS TASK 8 LUMP SUM	\$ 144,220.00 712	\$ 14,880 48	\$ 28,600 104	\$ 37,800 168	\$ 27,380 148	\$ -	\$ 19,600 140	\$ -	\$ 13,200 80	\$ 2,760 24	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	712	\$ 144,220.00 \$ 144,220.00
9	PERMITTING																					<del>y</del> 144,220.00
	Preapplication Meetings		8	8	0	16	0	0	0	0	0	0	3,600	0	0	0	0	0	0	0	32	\$ 11,240.00
	Prepare permit application (COJ 10	Set. WW. USACE. FR	16	16	0	160	0	0	0	40	0	6,236	53,805	0	0	0	0	0	0	0	232	\$ 105,601.00
	COJ Building Department	, 500, WW, 05, 10L, ER	8	40	0	40	0	0	0	40	0	0	0	0	0	0	0	0	0	0	128	\$ 27,480.00
	RAIs		8	8	0	20	0	0	0	20	0	6,236	0	0	0	0	0	0	0	0	40	\$ 17,916.00
	Expenses											,								0		, , , , , , ,
	TASK 9 LABOR FEE TASK 9 HOURS	\$ 162,237.00 448	\$ 12,400 40	\$ 19,800 72	\$ -	\$ 43,660 236	\$ -	\$ -	\$ -	\$ 16,500 100	\$ -	\$ 12,472	\$ 57,405	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	432	\$ 162,237.00
	TASK 9 LUMP SUM													1			1			1		\$ 162,237.00
10	RISK REGISTER																					
10.1	Prepare Initial Risk Register		10	68	0	0	0	0	0	0	0	6,570	0	0	0	0	0	0	0	0	78	\$ 28,370.00
10.2	Meet with JEA		4	8	0	0	0	0	0	0	0	1,290	0	0	0	0	0	0	0	500	12	\$ 5,230.00
10.3	Revise Risk Register		2	8	0	0	0	0	0	0	0	3,285	0	0	0	0	0	0	0	0	10	\$ 6,105.00
	Expenses																			0		
	TASK 10 LABOR FEE TASK 10 HOURS TASK 10 LUMP SUM	\$ 39,705.00 100	\$ 4,960 16	\$ 23,100 84	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,145	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 500	100	\$ 39,705.00 \$ 39,705.00
11	CMAR SERVICES																					
	Answer Questions From Bidders		108	460	180	0	40	0	0	40	0	6,780	0	0	55,000	0	0	0	0	0	828	\$ 275,460.00
	Limited Assistance Review of CMAR	R GMPs	108	240	80	0	40	0	0	40	0	5,200	10,050	0	0	0	0	0	0	0	508	\$ 145,930.00
	Engage CMAR in Reviewing Progres		100	320	0	0	0	0	0	40	0	29,960	11,330	0	0	0	0	0	0	0	460	\$ 166,890.00
	Attend CMAR Workshops		40	200	0	0	0	0	0	0	0	11,200	25,030	0	0	0	0	0	0	3,000	240	\$ 106,630.00
	Expenses																			0		
	TASK 11 LABOR FEE TASK 11 HOURS <b>TASK 11 LUMP SUM</b>	\$ 694,910.00 2,036	\$ 110,360 356	\$ 335,500 1,220	\$ 58,500 260	0	\$ 13,200 80	0	0	\$ 19,800 120	0	\$ 53,140	\$ 46,410	\$ -	\$ 55,000	) \$ -	\$ -	\$ -	\$ -	\$ 3,000	2,036	\$ 694,910.00 \$ <b>694,910.00</b>
	SUBCONSULTANTS																					
	Survey		0	0	0	0	0	0	0	0	0	0	0	0	0	192,120	0	0	0	0		\$ 192,120.00
	Alpha		0	0	0	0	0	0	0	0	0	0	0	108,854	0	0	0	0	0	0		\$ 108,854.00
12.3	Universal		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90,000	0		\$ 90,000.00
	TASK 12 LABOR FEE TASK 12 HOURS	\$ 390,974.00 0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 108,854.00	\$ -	\$ 192,120.00	\$ -	\$ -	\$ 90,000.00	\$ -	0	\$ 390,974.00
	TASK 12 LUMP SUM																					\$ 390,974.00
	MISC ALLOWANCE										1								1			\$ 2,000,000.00
-											+					-	-		+			
											+								+			
	Expenses										1								1			
	Елрепосо										1								1			
	ALLOWANCE LABOR FEE	\$ -	\$ -	\$	\$	\$	\$	\$	\$	\$	\$ -	\$	\$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 2,000,000.00
	ALLOWANCE HOURS	0	0	0	0	0	0	0	0	0	0									-	0	
	T&M																					\$ 2,000,000.00
	TOTAL PROJECT LABOR FEE	\$ 11,016,361. <u>00</u>	\$ 881,020.00	\$ 2,468,400.00	\$ 1,221,750.00	\$ 666,740.00	\$ 517,770.00	\$ 302,960.00	\$ 455,600.00	\$ 1,327,920.00	\$ 70,380.00	\$ 621,332.00	\$ 1,461,815.00	\$ 108,854.00	\$ 558,200.00	\$ 192,120.00	\$ 20,000.00	\$ 20,000.00	\$ 90,000.00	\$ 31,500.00		\$ 13,016,361.00
		38,214	2842	8976	5430	3604	3138	2164	3400	8048	612										38,214	
	TOTAL PROJECT HOURS TOTAL PROJECT	30,217	20 .2	037.0																		\$ 13,016,361.00

	Exhibit 2	Vice President (PM)	Vice President (Technical / QA-QC)	Senior Associate (Co-PM)	Senior Associate (Process)	Principal Engineer	Engineer	Secretary / Office Support	ASRus	ATM (Geosyntec)	Expenses	HOURS/ TASK	T	OTAL FEE/ TASK
TASK		\$ 310	\$ 310	\$ 275	\$ 275	<b>\$ 165</b>	\$ 140	\$ 115						
1	PROJECT MANAGEMENT													
1.1	Prepare scope and work plan	4	0	0	0	0	0	0	0	0	0	4	\$	1,240.00
1.2	Prepare monthly invoices, progres	0	0	8	0	0	0	8	2,640	0	0	16	\$	5,760.00
1.3	Attend virtual kick-off, EOR review		0	8	4	0	8	0	0	0	0	24	\$	5,660.00
1.4	Monthly call with JEA and Hazen	8	0	12	0	0	0	0	0	0	0	20	\$	5,780.00
1.5	Coordinate with JEA throughout p	32	0	64	0	0	0	0	2,560	0	0	96	\$	30,080.00
1.6	Manage sub-consultants	8	0	12	0	0	0	0	0	0	0	20	\$	5,780.00
1.7	Coordinate with internal and exter	64	0	64	0	0	0	8	0	0	0	136	\$	38,360.00
	Expenses													,
	•													
	TASK 1 LABOR FEE	\$ 37,200	\$ -	\$ 46,200	\$ 1,100	\$ -	\$ 1,120	\$ 1,840	\$ 5,200	\$ -	\$ -		\$	92,660.00
	TASK 1 HOURS	120	0	168	4	0	8	16			-	316		
	TASK 1 LUMP SUM												\$	92,660.00
2	DATA COLLECTION AND ASSESS	SMENT												
2.1	Evaluate Management Alternative:													
2.1.1	Deep Injection Wells (DIW)	16	8	8	24	80	0	0	12,500	0	0	136	\$	41,940.00
2.1.2	Potential reuse opportunities	24	8	48	222	128	0	0	0	0	0	430	\$	105,290.00
2.1.3	APRICOT Wetlands	10	8	40	12	60	0	0	0	36,670	0	130	\$	66,450.00
2.1.4	Aquifer Recharge Wells / Water Pi	16	8	12	36	0	52	0	0	0	0	124	\$	27,920.00
2.2	Attend three progress meetings w	12	0	16	0	0	24	0	0	2,670	0	52	\$	14,150.00
2.3	Develop Class 5 Construction Esti		0	16	40	0	80	0	1,940	2,890	0	144	\$	33,910.00
2.4	Develop schedule of implementati	4	0	8	0	0	40	0	0	0	0	52	\$	9,040.00
2.5	Summarize permitting requiremen	4	0	8	0	0	12	0	0	0	0	24	\$	5,120.00
2.6	Prepare draft TM													
2.6.1	TM and meet with JEA to review of	12	8	24	24		120		10,320	14,090		188	\$	60,610.00
2.6.2	Update TM and submit	4		8	8		40					60	\$	11,240.00
	Expenses												\$	-
	·													
	TASK 2 LABOR FEE	\$ 34,100	\$ 12,400	\$ 51,700	\$ 100,650	\$ 44,220	\$ 51,520	\$ -	24,760	56,320	0			375,670
	TASK 2 HOURS	110	40	188	366	268	368	0				1,340		
	TASK 2 LUMP SUM												\$	375,670.00
	ALLOWANCE												\$	50,000.00
													ſ	
													Ĺ	
	Expenses												ſ	
													ĺ	
	ALLOWANCE LABOR FEE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			\$ -		\$	50,000.00
	ALLOWANCE HOURS	0	0	0	0	0	0	0			-	0		
	TOTAL PROJECT LABOR FEE		\$ 12,400.00	\$ 97,900.00	\$ 101,750.00	\$ 44,220.00	\$ 52,640.00	\$ 1,840.00	\$ 29,960.00	\$ 56,320.00	\$ -		\$	518,330.00
	TOTAL PROJECT HOURS					268					-	1,656		
	TOTAL PROJECT												\$	518,330.00

Award #2 Supporting Documents 03/20/2025
1411499846 Design Services for Northwest WRF Exploratory Well Fee Estimate FINAL 10/8/24

	Exhibit 2	POSITION	Vice Presider (PM)	nt	Vice President (Technical/ QA-QC)	Senio Associ (Co-P	iate	ASRus	Expenses	HOURS/ TASK	T	OTAL FEE/ TASK
TASK		RATE	\$ 3:	10	\$ 310	\$ 2	275					
1	PROJECT MANAGEMENT											
1.1	Prepare scope and work plan		2			4				6	\$	1,720.00
1.2	Prepare monthly invoices, progres	s update	16			32		7,040		48	\$	20,800.00
1.3	Attend virtual kick-off, EOR review	v scope	2		2	2		1,440		6	\$	3,230.00
1.4	Monthly call with JEA and Hazen		16		8	24		5,520		48	\$	19,560.00
1.5	Coordinate with JEA throughout p	roject	32			48				80	\$	23,120.00
1.6	Manage sub-consultants					8				8	\$	2,200.00
1.7	Develop SharePoint Site					2				2	\$	550.00
	Expenses								2,500		\$	2,500.00
	TASK 1 LABOR FEE		\$ 21,0	080	\$ 3,100			\$ 14,000	\$ 2,500		\$	73,680.00
	TASK 1 HOURS		68		10	120	)		-	198		72.600.00
2	TASK 1 LUMP SUM		NGC								\$	73,680.00
2	WELL TECHNICAL SPECIFICATI	ONS AND DRAWI			4	4		17 200		12	_	20 700 00
2.1 2.2	Prepare specs and drawings		4		4	4		17,200		12	\$	20,780.00
2.2	Prepare prelim and relative costs	#b 154	2		2	2		1,760		6	\$	3,550.00
2.3 2.4	Attend design progress meeting w	/IUI JEA	2		2	2		1,660		6	\$	3,450.00
2.4	Revise specs and drawings				2			3,520	2,500		\$ \$	4,140.00 2,500.00
	Expenses								2,500		<b>&gt;</b>	2,500.00
	TASK 2 LABOR FEE		\$ 2,4	80	\$ 3,100	\$ 2,	,200	24,140	2,500			34,420
	TASK 2 HOURS		8		10	8				26		
	TASK 2 LUMP SUM							ı		1	\$	34,420.00
3	UIC PERMITTING ASSISTANCE											
3.1	Prepare and submit permit app		16		14	40		39,750	2,500	70	\$	62,550.00
	Expenses								2,500		\$	2,500.00
	TACK 3 LABOR FEE	¢ (F 0F0 00	4.0		+ 4240		000	+ 20 750	+ 5000			CE 050 00
	TASK 3 LABOR FEE			960	\$ 4,340			\$ 39,750	\$ 5,000	70	\$	65,050.00
	TASK 3 HOURS		16		14	40			-	70	<b>.</b>	65,050.00
4	TASK 3 LUMP SUM BIDDING OF WELL SERVICES									l	\$	05,050.00
4 4.1	Attend pre-bid meeting		2					1.070		2	ф	1,690.00
4.1 4.2	Address bidding questions and p	roparo addonda	2		2	2		1,070 3,840		6	\$	5,630.00
4.2 4.3	Evaluate bids and prepare rec of	•	2		2			1,220		2	\$	1,840.00
7.5	Expenses	awaru						1,220	2,500		\$	2,500.00
	Ехрепзез								2,300		Ψ	2,300.00
	TASK 4 LABOR FEE	\$ 11,660.00	\$ 1,8	860	\$ 620	\$	550	\$ 6,130	\$ 2,500		\$	11,660.00
	TASK 4 HOURS		6		2	2	550	φ 0/130	-	10	Ψ	11/000100
	TASK 4 LUMP SUM										\$	11,660.00
	ALLOWANCE										\$	30,000.00
	Expenses											,
	ALLOWANCE LABOR FEE	\$ -	\$ -		\$ -	\$	-		\$ -		\$	30,000.00
	ALLOWANCE HOURS		0		0	0			-	0		
	TOTAL PROJECT LABOR FEE		\$ 30,3	880	\$ 11,160	\$ 46,	,750	\$ 84,020	\$ 12,500		\$	214,810.00
	TOTAL PROJECT HOURS		98		36	170			-	304		
	TOTAL PROJECT										\$	214,810.00



Printed Name & Title

Appendix B – Proposal Forms 1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

#### **Appendix B Proposal Form**

COMPANY INFORMATION:	
COMPANY NAME: Pickett and Associates, LLC	
BUSINESS ADDRESS: 10151 Deerwood Park Bouleva	ard, Building 100, Suite 110
CITY, STATE, ZIP CODE: Jacksonville, FL 32256	
TELEPHONE: 813.877.7770	
TELEPHONE: 813.877.7770  EMAIL OF CONTACT: tbennett@pickettusa.cor	n
☑ I have read and understood the Sunshine Law/Public R understand that in the absence of a redacted copy my prop	
The Company shall submit one electronic copy of the signe prior to the Bid Due Date and Time.	ed proposal documents on the sourcing platform,
Company's Cer	tification
By submitting this Proposal, the Company certifies that the Copertaining to this RFP and agrees to abide by the terms and copelow is an authorized representative of the Company, that the State of Florida, and that the Company maintains in active state	nditions set forth therein, that the person signing e Company is legally authorized to do business in the
The Company certifies, under penalty of perjury, that it holds and other credentials required by law, Contract or practice to pupon the prospect of any change in the status of applicable lice other credentials, the Company shall immediately notify JEA of	perform the Work. The Company also certifies that, enses, permits, certifications, insurances, bonds or
We have received addenda	8.27.24
Signature of Authorize Officer of Firm or Agent	Date
Tom Bennett, PE, PMP, Vice President	813.877.7770

I

Phone Number

COMPANY INFORMATION

Appendix B – Proposal Forms
1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

### 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.

COMMANT 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: tbennett@pickettusa.com	
PRINT NAME OF AUTHORIZED REPRESENTATIVE: Tom Bennett, PE, PMP, Vice Preside	ent
SIGNATURE OF AUTHORIZED REPRESENTATIVE: Thomas & Benneth	
NAME AND TITLE OF AUTHORIZED REPRESENTATIVE: Tom Bennett, PE, PMP, Vice Pi	resident

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 undergound 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 1 Reference Company Name Florida Power & Light	
Reference Contact Person Name	Shawn Hansen, P.E.
Reference Contact Person Phone Nu	<sub>imber</sub> (561) 904-3313
Reference Contact Person E-Mail A	Charrie Hanasan Ofal asia
Date Work Began/Date Work Comp	olete 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.

Appendix B – Proposal Forms
1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

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.

Appendix B – Proposal Forms
1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

#### **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.

Appendix B – Proposal Forms 1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

#### **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.

Appendix B – Proposal Forms
1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

#### LIST OF SUBCONTRACTORS

JEA Solicitation Number 14111799247; 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
Geotechineal 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

10151 Deerwood Park Boulevard, Building 100, Suite 110,

Thomas 9 Benuto

Address: 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 Authorization arising from award of JEA submit said information will result in bid (Use additional sheets as necessary)	A14111799247 I (We) the ur	ndersigned understand that failure to
Class of Work (Category)	Name of JSEB Contractor	Percentage of Total Job or
Dollar Amount	(Indicate below)	
Geotechnical Engineering	Meskel and Associates Engineering, PLLC	5%
Surveying	Durden Surveying and Mapping	5%

Signed:

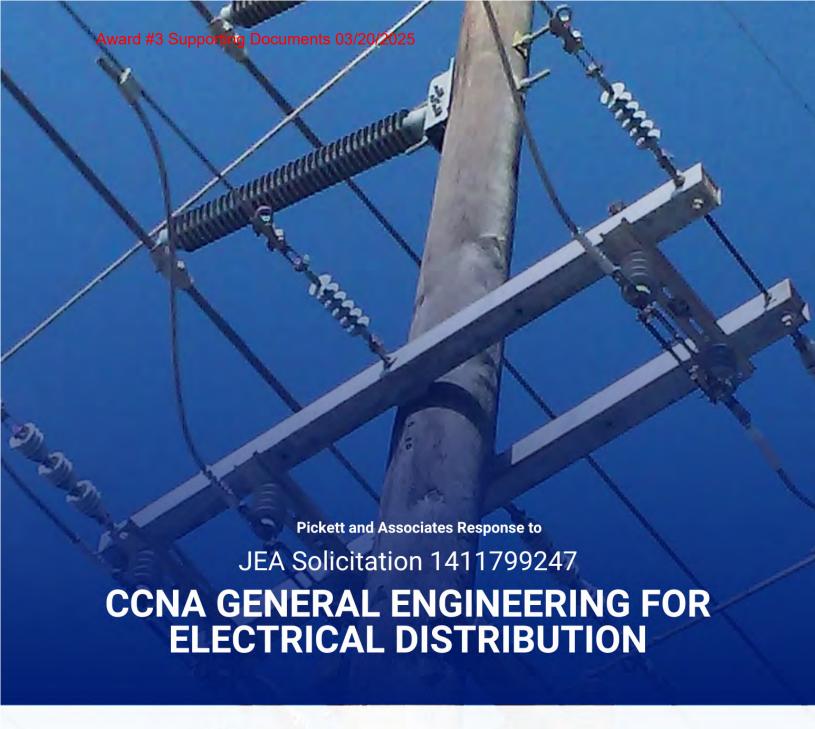
Company: Pickett and Associates, LLC

Address: 10151 Deerwood Park Boulevard, Building 100, Suite 110, Jacksonville FL 32256

to

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.













10151 Deerwood Park Blvd. Bldg 100, Ste. 110 Jacksonville, FL 32256



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

Thomas 9 Benuto

Pickett and Associates, LLC 5010 W. Nassau St Tampa, FL 33607 TBennett@pickettusa.com 813. 877. 7770 x101





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Printed Name & Title

Appendix B – Proposal Forms 1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

#### **Appendix B Proposal Form**

COMPANY INFORMATION:	
COMPANY NAME: Pickett and Associates, LLC	
BUSINESS ADDRESS: 10151 Deerwood Park Bouleva	ard, Building 100, Suite 110
CITY, STATE, ZIP CODE: Jacksonville, FL 32256	
TELEPHONE: 813.877.7770	
TELEPHONE: 813.877.7770  EMAIL OF CONTACT: tbennett@pickettusa.cor	n
☑ I have read and understood the Sunshine Law/Public R understand that in the absence of a redacted copy my prop	
The Company shall submit one electronic copy of the signe prior to the Bid Due Date and Time.	ed proposal documents on the sourcing platform,
Company's Cer	tification
By submitting this Proposal, the Company certifies that the Copertaining to this RFP and agrees to abide by the terms and copelow is an authorized representative of the Company, that the State of Florida, and that the Company maintains in active state	nditions set forth therein, that the person signing e Company is legally authorized to do business in the
The Company certifies, under penalty of perjury, that it holds and other credentials required by law, Contract or practice to pupon the prospect of any change in the status of applicable lice other credentials, the Company shall immediately notify JEA of	perform the Work. The Company also certifies that, enses, permits, certifications, insurances, bonds or
We have received addenda	8.27.24
Signature of Authorize Officer of Firm or Agent	Date
Tom Bennett, PE, PMP, Vice President	813.877.7770

I

Phone Number

COMPANY INFORMATION

Appendix B – Proposal Forms
1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

### 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.

COMMANT 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: tbennett@pickettusa.com	
PRINT NAME OF AUTHORIZED REPRESENTATIVE: Tom Bennett, PE, PMP, Vice Preside	ent
SIGNATURE OF AUTHORIZED REPRESENTATIVE: Thomas & Benneth	
NAME AND TITLE OF AUTHORIZED REPRESENTATIVE: Tom Bennett, PE, PMP, Vice Pi	resident

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 undergound 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 1 Reference Company Name Florida Power & Light	
Reference Contact Person Name	Shawn Hansen, P.E.
Reference Contact Person Phone Nu	<sub>imber</sub> (561) 904-3313
Reference Contact Person E-Mail A	Charrie Hanasan Ofal asia
Date Work Began/Date Work Comp	olete 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.

Appendix B – Proposal Forms
1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

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.

Appendix B – Proposal Forms
1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

#### **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.

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Appendix B – Proposal Forms 1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

#### **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.

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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.

Appendix B – Proposal Forms
1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

#### LIST OF SUBCONTRACTORS

JEA Solicitation Number 14111799247; 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
Geotechineal 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

10151 Deerwood Park Boulevard, Building 100, Suite 110,

Thomas 9 Benuto

Address: Jacksonville FL 32256

Date: 8.27.24

Appendix B – Proposal Forms 1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

#### LIST OF JSEB SUBCONTRACTORS

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Surveying	Durden Surveying and Mapping	5%

Signed:

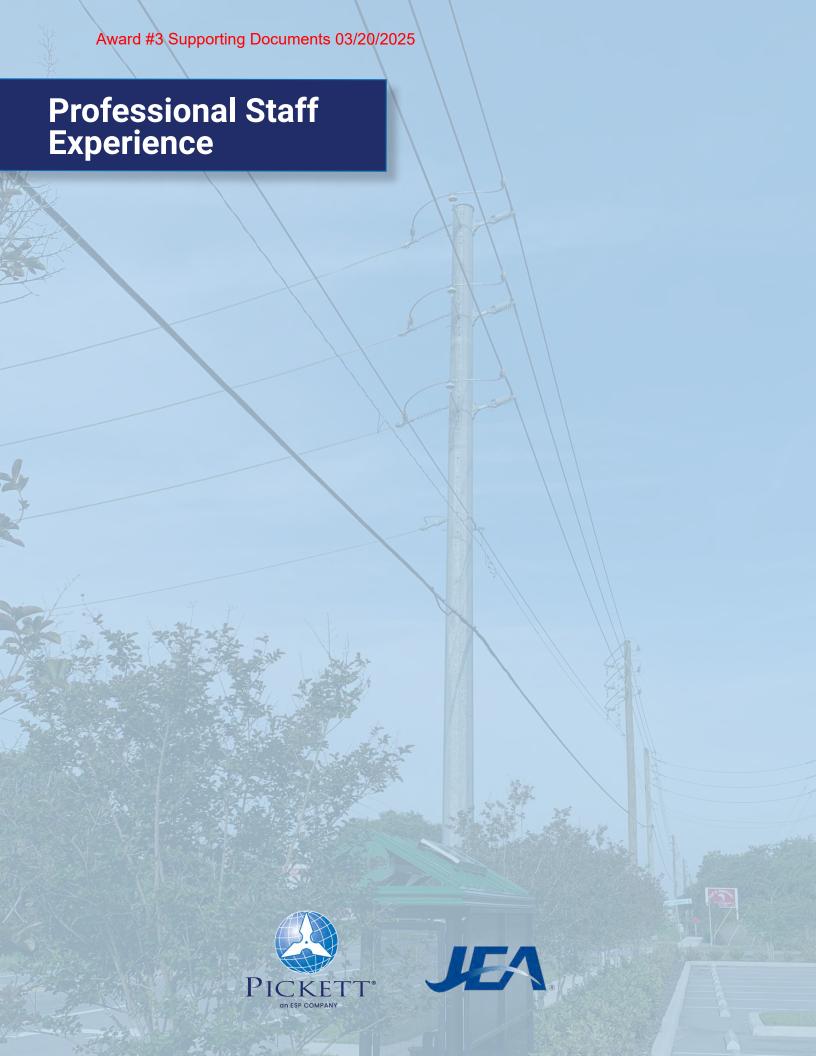
Company: Pickett and Associates, LLC

Address: 10151 Deerwood Park Boulevard, Building 100, Suite 110, Jacksonville FL 32256

to

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



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 enagements and workflow of our subcontractors.

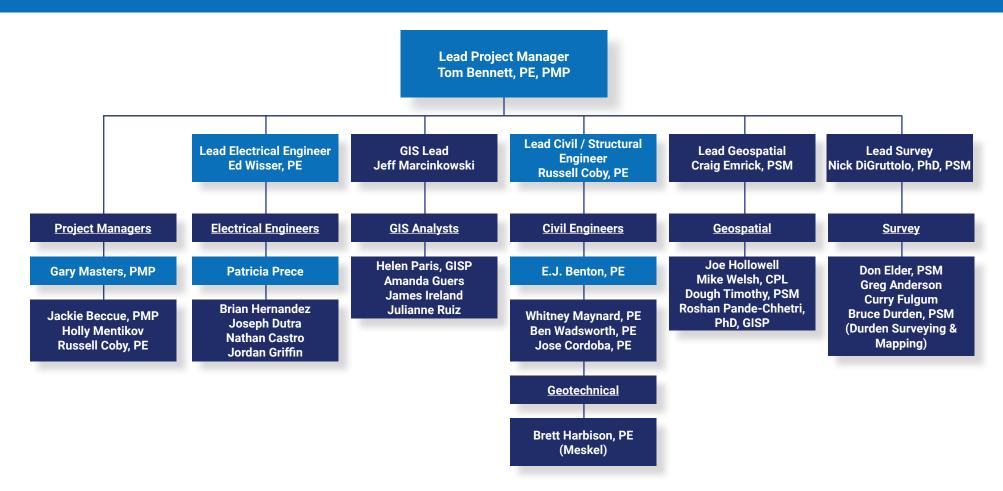


**Durden Surveying and Mapping** Inc is a 3rd Generation owned Land Surveying Company that has been surveying in the state of Florida since the early 1940's. They are based out of Jacksonville Beach, FL and we service the entire State of Florida, as well as various government projects. Durden is a JSEB Certified and are TWIC ready for any of your surveying needs.



Meskel&AssociatesEngineering(MAE) is a small business head quartered 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.





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





# PICKETT®

### 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 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.

#### **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** 

#### **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, 900ton 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.



# PICKETT\*

## Total Years of Experience:

## Principal Engineer

#### **Education**

45

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 Enginee Project Experience

#### **Transmission:**

Project Client and Facility: Sunbreak 230kV Transmission

## 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).

#### Ed Wisser, PE

Lead Electrical Engineer

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 Waukeenah 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 makeready 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

design included provision for transferring transformers and laterals.

**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



#### **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	<b>2019 - Present</b>
•	Worley Parsons – Principal Engineer	2011 - 2019
•	JEA – Project Engineer/ Project Manager	2008 - 2011
•	Brackett and Associates – Engineer I/ II	2003 - 2007

#### **Russell Coby, PE**

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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.





# PICKETT®

### **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 crossfunctional 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 Furthermore, he formulates bidding. procurement specifications, conducts inspections, and manages fire mitigation and vegetation clearing efforts. Mr. Masters also handles foreign utility coordination, landowner negotiations, environmental compliance, and 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 5<sup>th</sup> on target for budget.
  - 4 projects with Subcontractor Management; ground survey, LiDAR (mobile and UAV), geotechnical exploration and testing.
  - o All projects on schedule and on target for energization.

#### **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** 

#### **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.





#### **Patricia Prece**

#### Lead Electrical Engineer

#### **Years of Experience:**

With Pickett: 2 years Total: 10 years

**Pickett Classification:** 

**Project Engineer** 

#### **Education**

Bachelor of Science, Electrical Engineering, Florida Atlantic University

#### **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.

#### **PATRICIA PRECE**

#### Lead Electrical Engineer

- 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.



#### **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



#### E.J. Benton, PE

#### Lead Civil Engineer

#### **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.

#### Award #3 Supporting Documents 08/20/20026, PE

**Lead Civil Engineer** 

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.

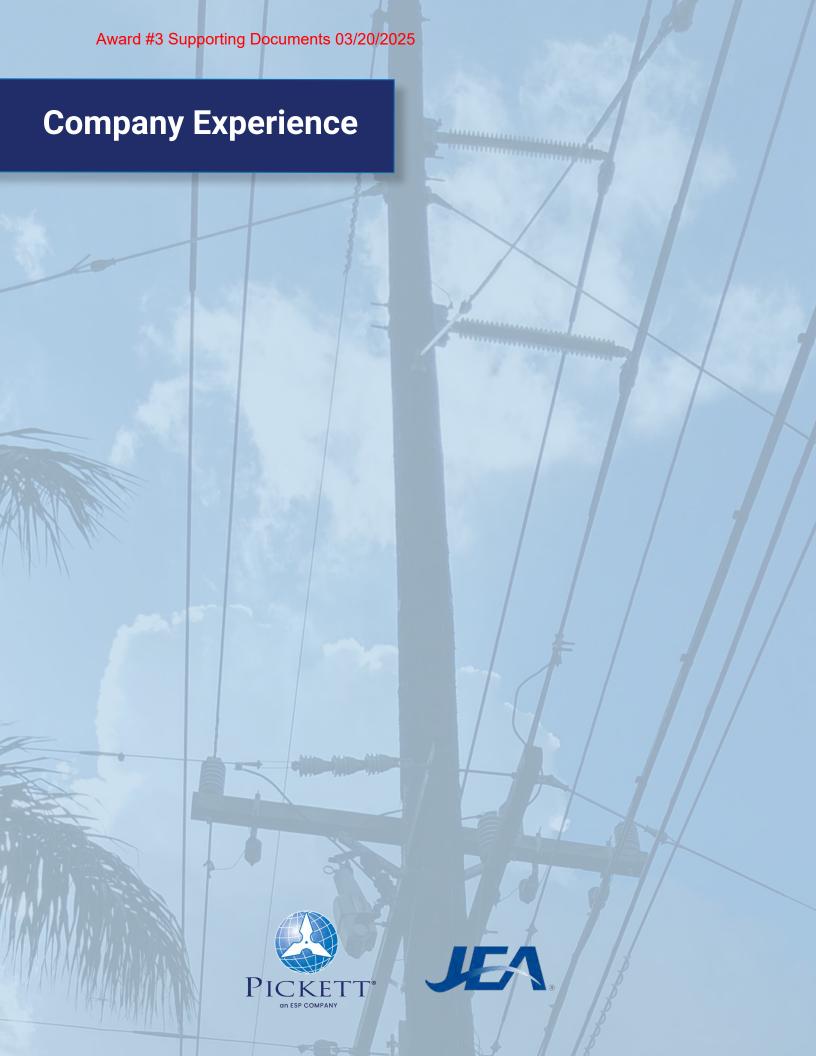
Duke Energy Progress, Cape Fear River Crossing, 2016 – 2020. The project consisted of providing design services for raising an existing line over the Cape Fear River in Wilmington, NC to provide increased clearance for the North Carolina State Ports Authority. This project consisted of multiple vertical 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 reconductor 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 03/20/2025



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.



## 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 underbuild 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



## 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 Talguin, the project involved relocating portions of 25 kV feeders to 20 new transmission poles and replacing / installing 36 wood mid-span poles, using Talguin 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 underbuild 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.



## 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



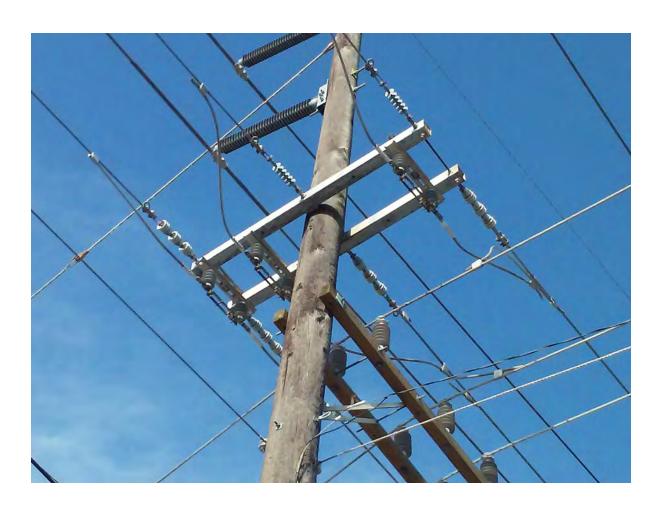
and PGA Boulevard. Our team also designed and coordinated the construction of 300 linear feet of undergroundsecondaryconduittofacilitateelectricalconnectionstoatrafficsignalatthesameintersection. We provided comprehensive support to FDOT and the client for outage and transfer coordination.

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.

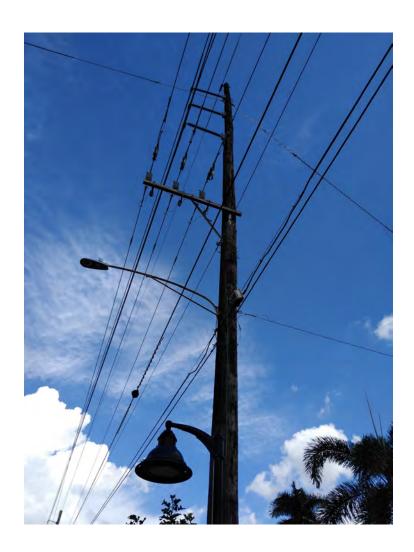
Safety and compliance were prioritized, leading to thorough clearance assessments and obtaining the necessary NCDOT Road Crossing Utility permit for the Jack and Bore operation beneath Providence



## 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 60foot 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**









## **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.



## 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 lifecycle.

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 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)





## Transmission Line Engineering

#### **Services**



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.



- 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



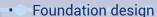


## Substation Engineering

#### 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:



- 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





## 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-ongrade, 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





## 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 iurisdictions
- DOT, county and local permits for driveway aprons and public right-of-way improvements
- Drainage calculations
- · As-built certifications



# Pickett and Associates Surveying



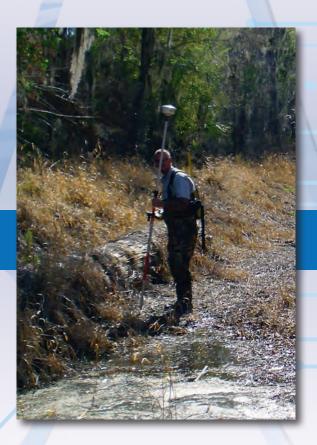






## **Ground Surveying & Terrestrial LiDAR**

#### **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.

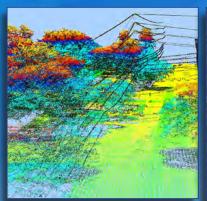
At Pickett, We Take The Safety Of Our Personnel And The Public Seriously And We Give It The Attention It Deserves. We instill a safety culture across the organization by adopting practices such as daily tailgate safety meetings and adhering to our clients' internal safety policies. Our crews are trained and certified in multiple safety-related standards and procedures. Our survey deliverables include:

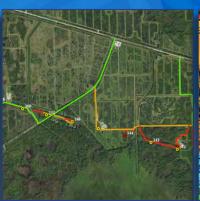
- Laser scanning
- Boundary surveys
- ALTA/ACSM surveys
- Topographic surveys
- Corridor surveys
- Hydrographic surveys
- Route surveys
- As-built surveys

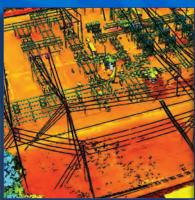
- GPS control surveys
- Quantity/volume surveys
- Control surveys
- Construction staking
- Subdivision platting
- OHWL surveys
- Legal descriptions
- · Expert witness testimony



# Pickett and Associates Aerial Mapping



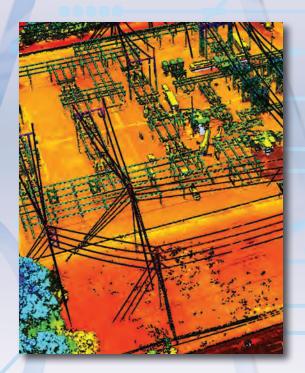






## Aerial LiDAR & Digital Imaging

#### **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



## 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



## 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 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.





## 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, capitol 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.



## 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 interpersonal 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.



## 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 Manufactures Association (NEMA)
- Underwriters Laboratory (UL) UL-347, High Voltage Industrial Control Equipment
- National Electrical Code (ANSI CI) 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)



## 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)



### 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

**COMPANY INFORMATION:** 

Appendix B – Proposal Forms 1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

#### Appendix B Proposal Form

Chen Moore and Associates
501 Riverside Avenue, # 501
Jacksonville, FL, 32202
(904) 398-8636
pmoore@chenmoore.com

X 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**

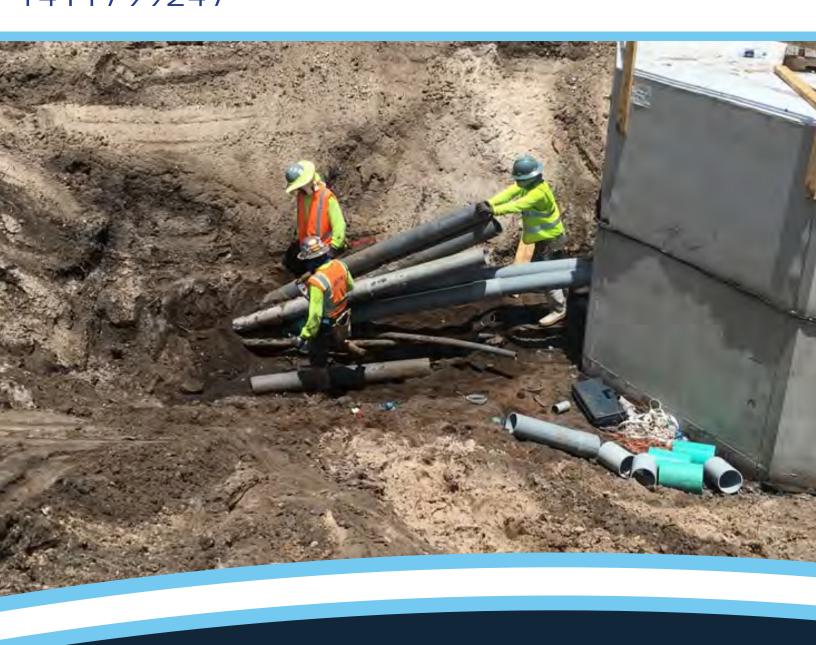
By submitting this Proposal, the Company certifies that the Company has read and reviewed all of the documents pertaining to this RFP and agrees to abide by the terms and conditions set forth therein, that the person signing below is an authorized representative of the Company, that the Company is legally 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 addendathrough	
	August 22, 2024
Signature of Authorize Officer of Firm or Agent	Date
Peter Moore, P.E., F.ASCE, ENV SP, LEED AP, President	(954) 730-0707
Printed Name & Title	Phone Number

CCNAGENATION Services For Electric
Distribution
Solicitation Number
1411799247







chen moore and associates

# Award #3 Supporting Documents 03/20/2025 TABLE OF CONTENTS

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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 solicitaion. 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.

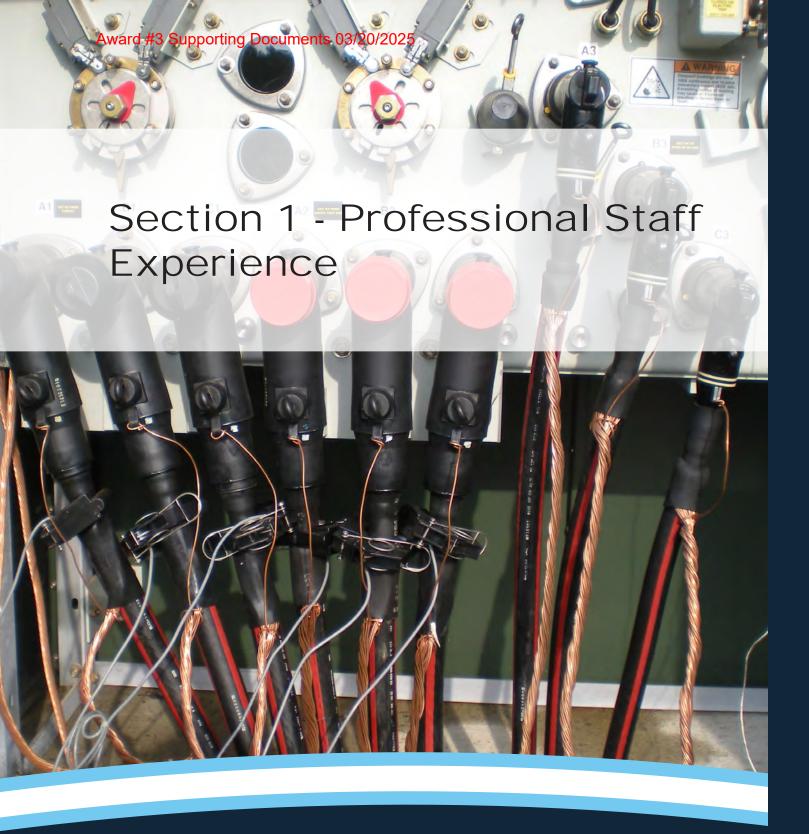
In the following pages, please find our qualifications, team, experience, and approach. We are committed to providing the District with professional services delivered proactively on time and within budget. We have the available staff and resources needed to complete the planning, design, permitting, 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,

Peter Moore, P.E., F.ASCE, FACEC

Chief Executive Officer

CHEN MOORE AND ASSOCIATES, INC.



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





Building Community<sub>sm</sub>



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 Doung, 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 mediumvoltage 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.

- 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
- acSELerator 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.



- 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

#### Distribution Engineering:

#### San Diego Gas & Electric - San Diego, California

reviews, and construction support. His project work includes:

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



SECTION 1: PROFESSIONAL STAFF EXPERIENCE

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.

Relocted 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

#### **Areas of Specialization**

of IEEE

- 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 affective 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 to26kV
- 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





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 designbuild 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.

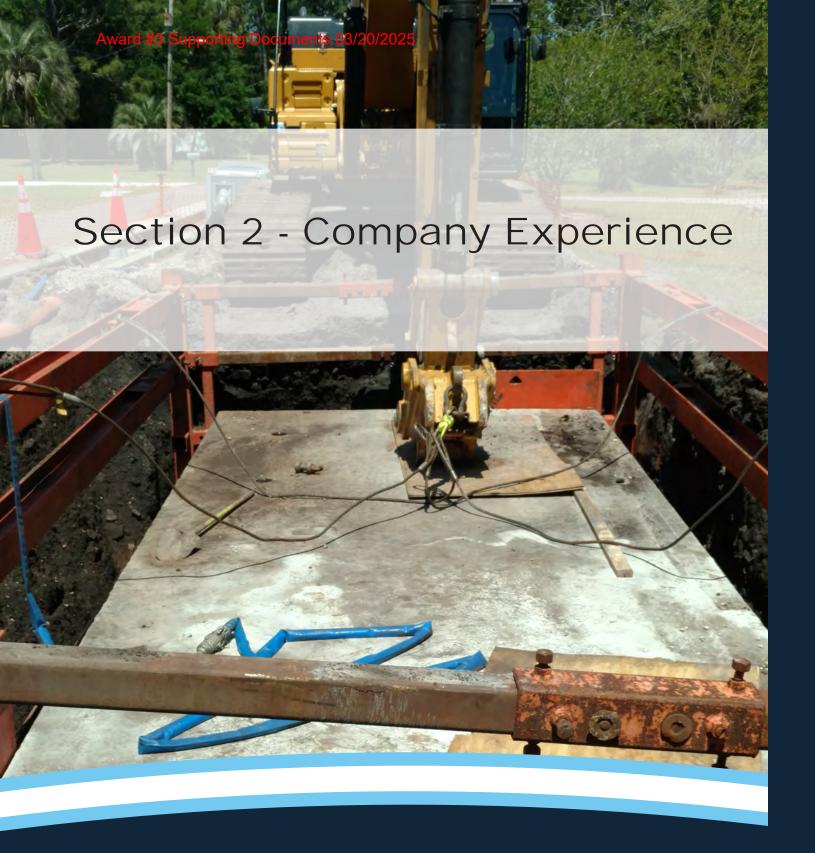
Dan has over **25 years of experience** in Structural & Civil Engineering including 8 years partnering with Chen Moore Associates (formerly Fred Wilson Associates).

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.







CCNA General Engineering Services For Electric Distribution Solicitation Number 1411799247



#### **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:

- Constant updates
- 2. Consolidated and concise documentation via email
- 3. Conference calls and virtual meetings
- 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.

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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 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.



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. PRIX HIGHLIGHT - DELETE REMOVE	
CONCURRENCE	GREEN CHECKMARK (*) - AGREE WITH COMMENT, INCORPORAT GREEN X-OUT (*) - DISAGREE WITH COMMENT, EXCLUDE	
CHANGES MADE	GREEN OUTLINE - INCORPORATED	
CHANGES VERIFIED	RED CHECKMARK (✓) - 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**

- a) 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.
- b) 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



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.





SECTION 2: COMPANY EXPERIENCE

# 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 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



**SECTION 2: COMPANY EXPERIENCE** 

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



SECTION 2: COMPANY EXPERIENCE

## 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 preprepared 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.



#### SECTION 2: COMPANY EXPERIENCE

#### Award #3 Supporting Documents 03/20/2025

### 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, 1.1 miles. 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 250foot 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



## Award #3 Supporting Documents 03/20720725 3: JACKSONVILLE SMALL AND EMERGING BUSINESS 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%

Department of Finance and Administration Procurement Division

#### CITY OF JACKSONVILLE

November 20, 2023

Suzanna Milbrandt VIA Consulting Services, Inc. 10250 Normandy Blvd., Suite 304 Jacksonville, FL 32221

#### Re: JSEB Re-certffication Approved

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 gua

907 Architectural and Engineering Services, Non-Professional specifically:

-40 Engineering Services, Nort-Licensed (Not C -40 Engineering Services, Nort-Licensed (Not C -53 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:

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.

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.jseb.coj.net



August 23, 2023

Meskel and Associates Engineering, LLC 3728 Philips Hwy, Ste 208 Jacksonville, FL 32207 Attn: Antoinette Meskel

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 (JSBB). This certification enables your company to compete for work and perform work as a JSBB enterprise. JSBB certification does NOT guarantee work. Your company is certified to participate in the areas of:

907 Architectural and Engineering Services, Non-Professional:

Refer to JSBD Prectory for specific commodities
922 Building Construction Services, New (Incl. Mointenance and Repair Services)
Refer to JSBD Directory for specific commodities
912 Construction Services, General (Including Maintenance and Repair Services):
Refer to JSBD Directory for specific commodities
918 Consulting Services
118 Consulting Services

925 Engineering Services, Professional: Refer to JSEB Directory for specific con

Refer to JSEB Directory for specific commodifies

926 Environmental and Ecological Services:

Refer to JSEB Directory for specific commodifies

889 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.

Sincereff.

Sandy Simpsoy Intermete 0/1858 Administrator
Equal Business Opportunity Office-lacksonville Small Emerging Business Program

Certification Approval Date: Certification Expiration Date:

214 North Hogan Street, Suite 800 I Jacksonville, FL 32202 I Phone 904 255 8840 I Fax 904 255 8842 I



## Section 4 - Required Forms



CCNA General Engineering Services For Electric Distribution
Solicitation Number 1411799247



**COMPANY INFORMATION:** 

Appendix B – Proposal Forms 1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

#### **Appendix B Proposal Form**

COMPANY NAME:	Chen Moore and Associates
BUSINESS ADDRESS:	501 Riverside Avenue, # 501
CITY, STATE, ZIP CODE:	Jacksonville, FL, 32202
ГЕLEPHONE:	(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 addendathrough	
	August 22, 2024
Signature of Authorize Officer of Firm or Agent	Date
Peter Moore, P.E., F.ASCE, ENV SP, LEED AP, President	(954) 730-0707
Printed Name & Title	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** Chen Moore and Associates COMPANY NAME: 501 Riverside Avenue, # 501 BUSINESS ADDRESS:\_\_\_\_ Jacksonville, FL, 32202 CITY, STATE, ZIP CODE: (904) 398-8636 TELEPHONE: pmoore@chenmoore.com E-MAIL: Peter Moore, P.E., F.ASCE, ENV SP, LEED AP PRINT NAME OF AUTHORIZED REPRESENTATIVE: SIGNATURE OF AUTHORIZED REPRESENTATIVE: ter Moore, P.E., F.ASCE, ENV SP, LEED AP NAME AND TITLE OF AUTHORIZED REPRESENTATIVE: **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 undergound 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.

Award #3 Supporting Documents 03/20/2025 Appendix B – Proposal Forms
1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

Project Overhead Distribution Engineering Reference Company Name	g Design 1 City of Bartow	
Reference Contact Person Name	Roger Murphy	
Reference Contact Person Phone Number	(863) 534-0142	
Reference Contact Person E-Mail Address	rmurphy.electric@cityofbartow.net	
Date Work Began/Date Work Complete	January 2020 – August 2022	
Contract Value	Design Fee: \$281,925.00 Construction Support Fee: \$129,6	34.00
Description of Project		
adding a dedicated source to service a the City's electrical system. CMA perfor load. CMA developed a slate of alternate each. CMA then worked with the City ardrop, and short circuit studies.  After CMA completed the preliminary strong a new 69kV-25kV power transformer, transformer, relay protection and controcircuit. CMA designed the conversion of the new line was designed using ductile to-back. The 25kV circuit is dedicated to Due to the congestion of overhead distri	relectric Utility, Bartow, FI (Overhead Project #1). The City new industrial mining facility. This would add a low med feasibility studies to determine the best options for serving options and prepared a report of costs, and drawbard the end user to build a SKM system model to run loading, voludies, CMA designed the electric system upgrades including a design of an expansion to the Southwest substation to add the package, relay settings, a new dedicated 25kV distribution for an existing 15kV feeder into a double circuit 25kV and 15kV iron poles framed as a vertical double circuit, 25kV and 15kV, of the mining facility and the 15kV circuit for normal system button leaving the substation, the new 25kV circuit was directive, where the new double circuit distribution line started.	sizing e new eeder / line. back- oads.
CMA prepared technical from preprepared construction documents, in assisted the City in reviewing the bids, in equipment, CMA reviewed the shop drawn During project construction, CMA continuous forms of the construction, CMA continuous forms of the construction, CMA continuous forms of the construction of	or the procurement of owner furnished substation equipment. Cluding drawings and technical for open bidding. Including recommendations for a bid award. For the owner furn wings and accompanied the city personnel during witness test and with reviewing the Contractor's material submittals and the city personnel during witness test and the city personnel during witness	CMA ished ing of
the Contractor was working in a safe ma	nner and following the City's requirements as <u>in the politor also allowed better project coordination and quicker resp</u>	<u>roject</u>
When construction was complete, CN commissioning, and energization of the	· · · · · · · · · · · · · · · · · · ·	ection,

Award #3 Supporting Documents 03/20/205 – Proposal Forms
1411799247 (RFP) CCNA General Engineering Services For Electric Distribution

Project Overhead Distribution Engineering Reference Company Name	ng Design 2 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
was contracted by the Utilities Commission of the existing Smyrna Substation. The distributions. The circuits were designed to be routed to the contract of the circuits were designed to	New Smyrna Beach, FI. Chen Moore and Associates (CMA) of New Smyrna Beach to add two 23kV distribution feeders to attion circuits were designed at 35kV due to the proximity to the ed through an existing 138kV transmission corridor. Due to the completed the design to replace one of the 138kV transmission
Ines.  The initial design was developed as a new west thru the transmission corridor, over I-9 distribution feeders. One of the circuits was on 1.6 miles. After initial investigation, it was dewould be to the utilities advantage to design to crossing under I-95. CMA designed a due to the east side of I-95 that was approximated directional drills approximately 900 feet each riser poles were designed for 1000kcmil 35kk circuit was designed to be a vertical underburbules, to Airport substation, 1.1 miles. The deto see if adding the underbuilt circuit would design included 50-foot intermediate spunce 250-foot span on the distribution circuit. The	double circuit overhead feeders from the substation heading 15, continuing thru the corridor to interconnect to two existing designed to be 1.1 miles and the 2nd feeder was designed to be stermined that due to the circuits having to cross interstate 95 it the distribution circuits as an underground installation until after otbank and directional drilled raceway between the substation tely 0.5 miles. The crossing under I-95 was two (2) separate the consisting of 4-8-inch HDPE SIDR conduits. Underground of EPR cable and group operated switches. The distribution will ton the existing 138kV transmission line, static cast concrete the sign included the evaluation of the existing transmission poles of meet the current extreme wind loading requirements. The concrete poles for the distribution circuit to maintain a maximum the distribution circuit consisted of 3-652 AAAC (Elgin) phase and 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 ain on 50-foot intermediate poles to maintain the 250-foot limit.  CSR (Cardinal) and 144  OPGW. The distribution circuit
The overhead lines were modeled is PLSCA and setting depths due to poor soil conditions	ADD to verify all poles meet NESC wind loading requirements s.
· · · · · · · · · · · · · · · · · · ·	n PDF format and had plan and of the overhead and CMA developed custom details for any deviation to the utilities ards did not cover. CMA submitted technical and purchase

### Award #3 Supporting Documents 03/20/2025 - 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 Util	
CMA designed the relocation of underground	distribution, optic, and transmission circuits that were
	ve in Lake Buena Vista, FL. The roadway
•	ried 69kV transmission circuits approximately 3500 feet each
from the substation riser to a new splice pit bey	
•	V distribution duct bank and manhole system. The distribution
	luct bank and manhole system, Jack and Bore a 36-inch steel
	existing road, and Directional Drilling six (6) 6-inch conduits
. ,	• • • • • • • • • • • • • • • • • • • •
	nderground 15kV circuits. Approximately 11,000' LF of new
·	xisting secondary services were impacted by the relocation,
	the entrance Toll Plaza complex. CMA designed new service
	roadway lighting circuits to replace the existing service points
_ · · · · · · · · · · · · · · · · · · ·	The existing SCADA optic infrastructure was replaced
	system was installed from the substation to the
piece of equipment that was not impacted by the	ne roadway relocation.
CMA completed cable ampacity calculations for	r the ductbank, directional drill, and Jack & Bore installations.
· · · · · · · · · · · · · · · · · · ·	that the heat dissipation from the cables within the
	arrying capabilities. CMA wrote technical for
	excess heat dissipation to not restrict the ampacities of the
	Acess fleat dissipation to not restrict the ampacities of the
circuits.	
CMA developed a sequence of construction to	o allow the distribution and transmission systems to stay in
	•
<u>normal</u> as long as possible prior to	D CULOVEL TO THE PEROCALED SYSTEMS. CIVIA WOLKED 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.

4-5

## Award #3 Supporting Documents 03/20/205 – 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 In Buena Vista, FL. CMA designed the relocative were impacted by the required relocating (replacing temporary of the required relocating temporary).	terchange 69kV & 15kV Electric Utilities Relocation, Lake tion of underground transmission and distribution circuits that intersection of Osceola Parkway at Victory Way. The roadway (a) a portion of two (2) direct buried 69kV, 1500 kcmil, EPR
oit beyond the limits of the roadway construction oot section installed in directional drill consupproximately 1400 feet from the substation	eximately 3600 feet from the substation riser to a new splice suction to the east. The circuit was direct buried, with a 1450-sisting of 4-6-inch and 2-2-inch conduits. The second circuit, an riser to a new splice pit beyond the limits of the roadway rect buried, with a 1250-foot section installed in directional drill
relocation consisted of creating a new manle 750 kcmil circuits along with Fiber Optic SCA 6- & 8-way duct bank, octagor and two (2) 2-inch conduits, and three (3) Jac	1 15kV distribution duct bank and manholes. The distribution nole and duct system to and reroute six (6) 15kV, DA cable. The duct system consisted of new concrete encased all manholes, two (2) directional drills each having six (6) 6-inch ck and Bores each with one (1) 36-inch steel casing for ten (10) ander Victory Way and one (1) under Osceola Parkway.
Approximately 5,000' Circuit Feet of new thre distribution cable was installed.	ee phase 69kV cable and 26,000 circuit Feet of 15kV, 750 kcmil
Ampacity calculations were required to verife spaces would not limit the cable ampacity	for the ductbank, directional drill, and Jack & Bore installations.  y that the heat dissipation from the cables within the carrying capabilities. CMA wrote technical for excess heat dissipation to not restrict the ampacities of the
normal as long as possible prio	tor during construction by reviewing shop drawings, answering
The construction drawings were delivered in continuous of the scope of work. CMA developed or any detail that the standards did not cover format.	ed custom details for any deviation to the utilities standard detail

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 applicable)			
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 AF

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

ieeessar y )				
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 an Inspection Support	VIA Consulting Services, Inc. (DBE)	5%		

Department of Finance and Administration

#### CITY OF JACKSONVILLE

November 20, 2023

Suzanna Milbrandt VIA Consulting Services, Inc. 10250 Normandy Blvd., Suite 304 Jacksonville, FL 32221

#### Re: JSEB Re-certification Approved

The City of Jacksonville is pleased to announce that your company has been recertified as a Jacksonville Small and Emerging Business Enterprise (JSEB). This certification enables your company to compete for work and perform work as a Jenterprise. JSEB certification does NOT guarantee work.

907 Architectural and Engineering Services, Non-Professional specifically:

-40 Engineering Services, Non-Lecensed (Not C -75 Site Assessment and Site Field Observation 718 Consulting Services specifically; -88 Quality Assurance/Control Consulting 958 Management Services specifically; -77 Project Management Services

-// rroject Management Services
961 Miscellaneous Services, No. 1(Not Otherwise Classified) specifically:
-21 Cost Estimating

Your company's stature with the City of Jacksonville is active for two years provi 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.

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.jseb.coj.net



August 23, 2023

Meskel and Associates Engineering, LLC 3728 Philips Hwy. Ste 208 Jacksonville, FL 32207 Attn: Antoinette Meskel

The City of Jacksonville is pleased to announce that your company has been re-certified as a Jacksonville Small and Emerging Business Enterprise (JISB). This certification enables your company to compete for work and perform work as a JSBs enterprise. JSBs certification does NOT guarantee work. Your company is certified to participate in the areas of:

907 Architectural and Engineering Services, Non-Professional

Refer to JSBD Prectory for specific commodities

292 Building Construction Services, New (Incl. Maintenance and Repair Services)
Refer to JSBD Directory for specific commodities

912 Construction Services, General (Including Maintenance and Repair Services):
Refer to JSBD Directory for specific commodities

118 Consulting Services)

Refer to JSBD Directory for specific commodities

925 Engineering Services, Professional Refer to JSEB Directory for specific cor

Refer to JSEB Directory for specific commodities

926 Environmental and Ecological Services:

Refer to JSEB Directory for specific commodifies

**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 statute 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.

Signed:

214 North Hogan Street, Suite 800 I Jacksonville, FL 32202 I Phone 904 255 88

Peter Moore, P.E. F.ASCE, ENV SP, LEED AP

Company: Chen Moore and Associates Address: 501 Riverside Ave, #501 Jacksonville, FL 32202

August 22, 2024 Date:

### **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:	Name of JEA Employee(s) Working on Vendor's Current Contract(s) with JEA:				
1411799247					
Vendor Name:	Vendor Phone:				
Chen Moore and Associates	(904) 398-8636	(904) 398-8636			
Vendor's Authorized Representative Name and		· ·	Authorized Representative's Phone:		
Peter Moore, P.E., F.ASCE, EN	IV SP, LEED AP, Preside	nt (904) 398-8636			
NAME(S) OF JEA EMPLOYEE(S	) / PUBLIC OFFICER(S) W	TH POTENTIAL CONFLICT	OF INTEREST		
Name of JEA public officer(s), employee(s), or potential conflict of interest. If more than five, a		and/or relative(s) to vendor's cor	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.					
□χVendor has no conflict of interest to report.					
□ 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. □ 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:		Da	Date:		
		August 22	August 22, 2024		
Peter Moore, P.E., F.ASCE, E	Peter Moore, P.E., F.ASCE, ENV SPILED AP This form has been reviewed by:				
Name of JEA Ethics Officer:	Signature:		Date:		
Note:		1			

ACORD®

#### **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		CONTACT Gildo Benitez	
LassiterWare LLC		PHONE (A/C, No, Ext): (800) 845-8437 FAX (A/C, No): (888) 8	83-8680
1300 N. Westshore Blvd		E-MAIL GildoB@lassiterware.com	
Suite 110		INSURER(S) AFFORDING COVERAGE	NAIC#
Tampa	FL 33607	INSURER A: Crum & Forster Specialty Insurance Co	44520.
INSURED		INSURER B: Travelers Cas Ins Co of Amer	19046
Chen Moore & Associates, Inc. dba CMA		INSURER C: Travelers Casualty & Surety Co	19038
500 W. Cypress Creek Road		INSURER D:	
Suite 600		INSURER E :	
Fort Lauderdale	FL 33309	INSURER F:	
OCUMEN A OFF	ED 24.2E with for	DEVICION NUMBER	•

	Fort Lauderdale FL 33309 INSURER F:									
CO	COVERAGES CERTIFICATE NUMBER: 24-25 with forms REVISION NUMBER:									
IN CI	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		SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	s		
	COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE	\$ 1,000	0,000	
	CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 300,0	000	
	Contractors Pollution Liability						MED EXP (Any one person)	\$ 5,000	)	
Α		Y	Y	EPK146345	01/01/2024	01/01/2025	PERSONAL & ADV INJURY	\$ 1,000	0,000	
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	à .	0,000	
	POLICY PRO- JECT LOC						PRODUCTS - COMP/OP AGG	Ÿ	0,000	
	OTHER:						ContractorsPollution	\$ 1,000		
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000	0,000	
	X ANY AUTO						BODILY INJURY (Per person)	\$		
В	OWNED SCHEDULED AUTOS ONLY  HIRED NON-OWNED AUTOS ONLY  AUTOS ONLY	Y	Υ	BA2W1500872347G	01/01/2024	01/01/2025	BODILY INJURY (Per accident)	\$		
							PROPERTY DAMAGE (Per accident)	\$		
							PIP-Basic	\$ 10,00	50	
	UMBRELLA LIAB X OCCUR						EACH OCCURRENCE	\$ 5,000		
Α	EXCESS LIAB CLAIMS-MADE					EFX124401	01/01/2024	01/01/2025	AGGREGATE	\$ 5,000
	DED RETENTION \$							\$		
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						➤ PER OTH-ER			
С	ANY PROPRIETOR/PARTNER/EXECUTIVE	N/A		UB2W1488912347G	01/01/2024	01/01/2025	E.L. EACH ACCIDENT	\$ 1,000	0,000	
Ü	(Mandatory in NH)	ory in NH)	01/01/2024	01/01/2020	E.L. DISEASE - EA EMPLOYEE	\$ 1,000	0,000			
	If yes, describe under DESCRIPTION OF OPERATIONS below	, describe under CRIPTION OF OPERATIONS below					E.L. DISEASE - POLICY LIMIT	\$ 1,000	0,000	
Α	Professional Liability (Claims-Made) Limits Included in General Liability			EPK146345	01/01/2024	01/01/2025	Each claim Aggregate		00,000 00,,000	
DESC	CRIPTION OF OPERATIONS / LOCATIONS / VEHICL	ES (AC	ORD 1	01, Additional Remarks Schedule,	may be attached if more s	pace is required)				
JEA of th state	Re: SJRPP Substation Upgrades IEA, 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		SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
21 11001 011011 011001		AUTHORIZED REPRESENTATIVE
Jacksonville	FL 32202	Lleicea Fare Schmaltz
Jacksonville I	FL 32202	Polisica Harre Schmaltz

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ACORD 25 (2016/03)

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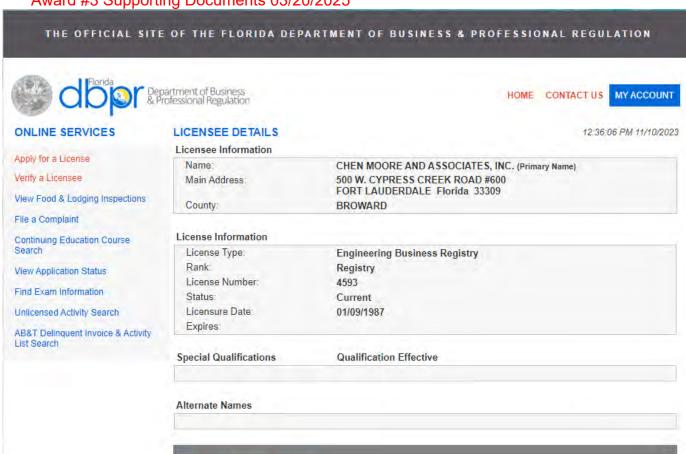
(Rev. October 2018)

## Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

Departn Internal		r instructions and the latest information.				
	1 Name (as shown on your income tax return). Name is required on	ne; do not leave this line blank.				
	CHEN MOORE & ASSOCIATES INC					
	2 Business name/disregarded entity name, if different from above					
page 3.	3 Check appropriate box for federal tax classification of the person following seven boxes.  Check appropriate box for federal tax classification of the person following seven boxes.	instructions on page 3):				
e. ns on	single-member LLC	Exempt payee code (if any)				
Print or type. Specific Instructions on page	Limited liability company. Enter the tax classification (C=C cornote: Check the appropriate box in the line above for the tax LLC if the LLC is classified as a single-member LLC that is disanother LLC that is not disregarded from the owner for U.S. if is disregarded from the owner should check the appropriate but the compression of the owner should check the appropriate but the compression of the owner should check the appropriate but the compression of the owner should check the appropriate but the owner should be	fication of the single-member owner. Do not check ded from the owner unless the owner of the LLC is tax purposes. Otherwise, a single-member LLC that the tax classification of its owner.				
eci	☐ Other (see instructions) ▶	(Applies to accounts maintained outside the U.S.)				
S	5 Address (number, street, and apt. or suite no.) See instructions.	Requester's name and address (optional)				
See	500 W CYPRESS CREEK RD SUITE 600					
	6 City, state, and ZIP code					
	FORT LAUDERDALE, FL 33309					
	7 List account number(s) here (optional)					
Par	Taxpayer Identification Number (TIN)					
Enter	your TIN in the appropriate box. The TIN provided must mat	e name given on line 1 to avoid Social security number				
hacku	in withholding. For individuals, this is generally your social se	y number (SSN). However, for a				
eside	ant alien, sole proprietor, or disregarded entity, see the instrues, it is your employer identification number (EIN). If you do n	s for Part I, later. For other  ve a number, see <i>How to get a</i>				
znaae TIN, la		or				
Note:	If the account is in more than one name, see the instruction	line 1. Also see What Name and Employer identification number				
Numb	per To Give the Requester for guidelines on whose number to	5 9 <b>-</b> 2 7 3 9 8 6 6				
Par						
1. The 2. I an Ser	to the state beginning withhelding bookings (a) I am every	number (or I am waiting for a number to be issued to me); and m backup withholding, or (b) I have not been notified by the Internal Revenue failure to report all interest or dividends, or (c) the IRS has notified me that I ar				
3. I an	n a U.S. citizen or other U.S. person (defined below); and					
4. The	e FATCA code(s) entered on this form (if any) indicating that I	exempt from FATCA reporting is correct.				
you ha	ave failed to report all interest and dividends on your tax return.	een notified by the IRS that you are currently subject to backup withholding because eal estate transactions, item 2 does not apply. For mortgage interest paid, tributions to an individual retirement arrangement (IRA), and generally, payments tion, 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				
Gei	neral Instructions	<ul> <li>Form 1099-DIV (dividends, including those from stocks or mutual funds)</li> </ul>				
Section of the sectio	on references are to the Internal Revenue Code unless other	Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)				
Futur	.  e developments. For the latest information about developm d to Form W-9 and its instructions, such as legislation enact	Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)				
	they were published, go to www.irs.gov/FormW9.	Form 1099-S (proceeds from real estate transactions)				
Pur	pose of Form	Form 1099-K (merchant card and third party network transactions)				
An inc	dividual or entity (Form W-9 requester) who is required to file nation return with the IRS must obtain your correct taxpayer	<ul> <li>Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)</li> </ul>				
identil	fication number (TIN) which may be your social security num	• Form 1099-C (canceled debt)				
(SSN)	, individual taxpayer identification number (ITIN), adoption yer identification number (ATIN), or employer identification n	Form 1099-A (acquisition or abandonment of secured property)				
(EIN).	yer identification number (ATIN), or employer identification in to report on an information return the amount paid to you, o nt reportable on an information return. Examples of informat	alien), to provide your correct TIN.				
return	is include, but are not limited to, the following.  n 1099-INT (interest earned or paid)	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.				

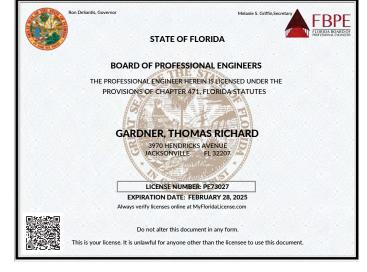
Form W-9 (Rev. 10-2018) Cat. No. 10231X



State of FL Professional Engineers License - Peter Moore is the qualified for the firm.

View Related License Information View License Complaint

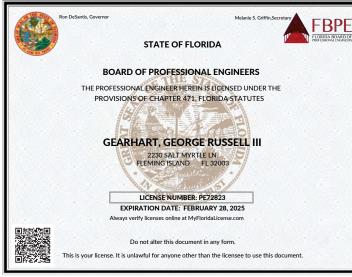




Freeman Bass, P.E.

Thomas Gardner, P.E.





Chris Gearhart, III, P.E.

John Franko, 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

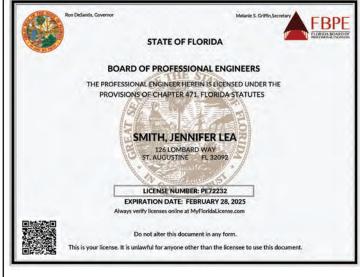


Secretary of State

Tracking Number: 9235937734CC

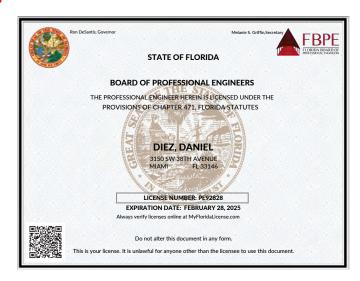
To authenticate this certificate, visit the following site, enter this number, and then follow the instructions displayed.

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.

Jan 04. 2024 **Secretary of State** 9235937734CC

Certificate of Status Desired: Yes

**FILED** 

#### **Current Principal Place of Business:**

500 WEST CYPRESS CREEK ROAD

SUITE 600

FORT LAUDERDALE, FL 33309

#### **Current Mailing Address:**

FEI Number: 59-2739866

500 WEST CYPRESS CREEK ROAD SUITE 600 FORT LAUDERDALE, FL 33309 US

#### 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 DT

Name MOORE, PETER M Name MCCLAIR, JASON J

Address 500 WEST CYPRESS CREEK ROAD Address 500 WEST CYPRESS CREEK ROAD SUITE 600

SUITE 600

City-State-Zip: FORT LAUDERDALE FL 33309 City-State-Zip: FORT LAUDERDALE FL 33309

Title Title **SECRETARY** HARRISON, ERIC D Name BREA, SAFIYA T Name

500 WEST CYPRESS CREEK ROAD 500 WEST CYPRESS CREEK ROAD Address Address

SUITE 600 SUITE 600

City-State-Zip: FORT LAUDERDALE FL 33309 City-State-Zip: FORT LAUDERDALE FL 33309

Title CFO Title VΡ

Name DANNELLY, SEAN E Name ACOSTA, JOSE L

Address 500 WEST CYPRESS CREEK ROAD Address 500 WEST CYPRESS CREEK ROAD

SUITE 600 SUITE 600

City-State-Zip: FORT LAUDERDALE FL 33309 City-State-Zip: FORT LAUDERDALE FL 33309

DO Title

LEHR, GREGORY BENJAMIN Name

500 WEST CYPRESS CREEK ROAD Address

SUITE 600

FORT LAUDERDALE FL 33309 City-State-Zip:

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.

01/04/2024 **CFO** SIGNATURE: SEAN DANNELLY

Electronic Signature of Signing Officer/Director Detail

Date





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

<b>Labor Category</b>	Hourly Rate
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
_	EC Fennell	8	8	8	24	8	181.18
	Enercon	5	4	7	16	5	222.66
	GAI Conultants	4	5	3	12	4	245.00
_	KCI Technologies	7	6	5	18	6	208.20
	Leidos Engineering	6	7	6	19	7	207.48
	Pickett & Associates, Inc	1	2	1	4	1	262.79
_	Power Engineers	2	2	4	8	3	242.07
	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
	Enercon	37.91	47.50	4.00		89.41	5
	GAI Conultants	43.36	45.00	4.00		92.36	4
	KCI Technologies	37.91	37.50	0.00		75.41	7
	Leidos Engineering	39.00	47.50	0.00		86.50	6
	Pickett & Associates, Inc	44.18	47.50	4.00		95.68	1
	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
	Chen Moore & Associates	43.09	50.00	4.00		97.09	1
2	EC Fennell	31.64	40.00	0.00		71.64	8
	Enercon	38.18	50.00	4.00		92.18	4
	GAI Conultants	41.73	46.25	4.00		91.98	5
	KCI Technologies	38.45	50.00	0.00		88.45	6
	Leidos Engineering	38.73	40.00	0.00		78.73	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
	Enercon	30.82	6.25	4.00		41.07	7
-	GAI Conultants	37.91	18.75	4.00		60.66	3
	KCI Technologies	28.09	16.25	0.00		44.34	5
	Leidos Engineering	36.00	6.25	0.00		42.25	6
	Pickett & Associates, Inc	42.27	27.50	4.00		73.77	1
	Power Engineers	36.82	15.00	4.00		55.82	4
9	TRC Engineers Overall Averages	Staff Experience (45 Points)	6.25 Company Experience (50 Points)	5.00 JSEB (5 Points)		28.98 Total	9 Rank
1	Chen Moore & Associates	41.45	40.00	4.00		85.45	2
	EC Fennell	28.73	31.67	0.00		60.39	8
	Enercon	35.64	34.58	4.00		74.22	5
	GAI Conultants	41.00	36.67	4.00		81.67	3
	KCI Technologies	34.82	34.58	0.00		69.40	6
	Leidos Engineering	37.91	31.25	0.00		69.16	7
	Pickett & Associates, Inc	43.18	40.42	4.00		87.60	1
	Power Engineers	41.27	35.42	4.00		80.69	4
	TRC Engineers	21.45	27.08	5.00	· · · · · · · · · · · · · · · · · · ·	53.54	9

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 T	<u>TX 77075</u>	
License Number: MAF-10726		
Phone Number: <u>713-208-2157</u> FAX No:	Email Address: <u>matt.smi</u>	th@powellind.com
BID SECURITY REQUIREMENTS  None required Certified Check or Bond Five Percent (5%)  SAMPLE REQUIREMENTS  None required Samples required prior to Bid Opening Samples may be required subsequent to	TERM OF CONTRACT One Time Purchase Term Other, Specify - Proje SECTION 255.05, FLORIDA STAT None required Bond required 100% of Bid Award	ect Completion UTES CONTRACT BOND
Bid Opening  QUANTITIES  Quantities indicated are exacting  Quantities indicated reflect the approximate q Throughout the Contract period and are subject to	quantities to be purchased	SURANCE REQUIREMENTS  Insurance required
with actual requirements.  PAYMENT DISCOUNTS  1% 20, net 30  2% 10, net 30  Other  None Offered  Item		SEDVICES. BID PRICE
No. ENTER YOUR BID FOR THE FOI	LLOWING DESCRIBED ARTICLES OR  Georgia Street	\$4,766,252.00
3	College Street  Kennedy	\$5,695,238.00 \$1,831,032.00
4	Total Bid Price	\$12,292,522.00
5 year warranty per specification (Adder) Note: Project terms required standard wa Offload Cranes budget (Adder): See detai Freight will be prepay and add, cost plus a freight 2 years out. Project terms to be negotiated or Powell p	nrranty (12/18 months) that is included Service proposal 20% (price is included in base bid	above) Powell can not quote firm

**BIDDER CERTIFICATION** 

Award #5 Supporting Documents 03/20/2025
1411829647 (RFP) 15kV Substation Switchgear Projects - Appendix B - Bid Forms

	at 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				
	Lubba ( De Paul			
1-3through	Jour 11 (de mu			
-	Bobby Joe Paul – Powell Electrical Systems, Inc.			
	Sales Director 11/18/2024			

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

#### **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.

COMPANY NAME: Powell Electrical Systems
BUSINESS ADDRESS: 8550 Mosley RD
CITY, STATE, ZIP CODE: Houston, TX 77075
TELEPHONE: <u>713-208-2157</u>
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:

RIDDER INFORMATION

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.
  - o 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

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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.

Each project reference should include the following:

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**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

Award #5 Supporting Documents 03/20/2025
1411829647 (RFP) 15kV Substation Switchgear Projects - Appendix B - Bid Forms

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 Are 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): owell MV are 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 Are 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):	Project Reference 3
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): owell 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):	Company Name: Oncor Electric
Company Contact E-Mail Address:dennis.johnson@oncor.com  Project Completion Date: 2/15/24	Company Contact Name: Dennis Johnson_
Project Completion Date: 2/15/24	Company Contact Phone Number: 817-996-7906
Where was this project installed? Dallas TX	Company Contact E-Mail Address:dennis.johnson@oncor.com_
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):   Dowell 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):	Project Completion Date: 2/15/24
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):  owell 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):	Where was this project installed? Dallas TX
Project Reference 4  Company Name: Dominion Energy	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 []
Project Reference 4  Company Name: Dominion Energy	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	
Project Reference 4  Company Name: Dominion Energy	
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):	
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):	
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):	
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):	
	Does this project include the design, fabrication, testing, documentation, delivery, and installation of 15kV Class Arc Terminating
	Description of Project (include manufacturer name for switchgear, building and breakers used for project):  Powell MV arc resistant gear in Powell PDC

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

ejection, and the Company agrees to employ the Subcontractors specified below: (Use additional sheets as necessate: This list of Subcontractors shall not be modified subsequent to bid opening, without a showing of good care
The undersigned understands that failure to submit the required Subcontractor information on this form will result ejection, and the Company agrees to employ the Subcontractors specified below: (Use additional sheets as necessate: This list of Subcontractors shall not be modified subsequent to bid opening, without a showing of good care
he written consent of JEA.
Type of Work Corporate Name of Subcontractor Primary Contact Person & License Number (if applicable) Percentage of Subcontractor Vork or Dollar Amount

Address:\_\_\_\_\_

Date:\_\_\_\_\_

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

T	TZI	OF	ISFR	SURCONTR	ACTORS
		<b>1</b> / F		31 Dt () 1 L	ALIUNS

The following JSEB S	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)	Name of JSEB Contractor	Percentage of Total Job or
Dollar Amount	(Indicate below)	

Signed:		
Company:		
Address:		
<b>-</b>		

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



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

#### 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 of 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

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	٥٠		Authorized Representative's Phone:		
vendor s Authorized Representative Name and Title	c.		Authorized Representative's Friorie.	•	
NAME(S) OF JEA EMPLOY	EE(S) / PUBLIC OFF	ICER(S) WITH I	POTENTIAL CONFLICT OF INTE	REST	
Name of JEA public officer(s), employee(s), or relat		ay be a	Relationship of JEA public officer(s)/employee(s) and/or		
potential conflict of interest. If more than five, atta	ach a second form.		relative(s) to vendor's company from list above (e.g. 1(a), 2, etc.). Please list all that apply:		
			eter). Trease list all triat appry.		
1.					
2.					
3.					
4.					
5.					
☐ Vendor has no conflict of interest to report.					
Uendor 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.					
☐ 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:					
,					
FOR JEA USE ONLY IF CONFLICT NOTED					
This form has been reviewed by:					
Name of JEA Ethics Officer:		Signature:		Date:	

Award #5 Supporting Documents 03/20/2025
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: <u>behrjv@jea.com</u> 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:



PROPOSAL No. 261652\_REV1 December 2, 2024 Page 2

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	$\mathbf{S}$

#### **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
- 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
- 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

- 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)
  - Wall Mounted NEMA 1 Enclosure with Annunciator SEL 2533012130XA2X0 (2533#PGBF)
  - 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

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

Number of Battery Strings: 1 String
 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 1

**Voltage Range (K factor):** 

**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

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

- 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
- 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)
- 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)
- SEL-487B with Conventional Secondary Inputs (0487B1X4X52XC0XEH9EEEEX, 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
- 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)
- 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
- 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)
- 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)
- 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
- 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
- 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)
  - Wall Mounted NEMA 1 Enclosure with Annunciator SEL 2533012130XA2X0 (2533#PGBF)
  - 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
- 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 2 2 2 1 1 2	Fire-Lite Powersonic Fire-Lite Fire-Lite Fire-Lite Fire-Lite Fire-Lite	MS4 Conventional Fire Alarm Panel PS1270 Battery 12 volt 7 amp.hr. Photoelectric Detector with Base Manual Pull Station Alarm Horn Strobe HVAC Controller Relay 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 kVService Voltage:13.2 kVBasic Impulse Level:95 kVPower Frequency Withstand:36 kVVoltage Range (K. factor):1

Voltage Range (K factor): 1
Short-circuit Current Rating: 25

Short-circuit Current Rating:

Close and Latch Capacity:

Close Voltage:

Trip Voltage:

Frequency:

25 kA rms

65 kA Peak

125 VDC

125 VDC

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,  $1/4 \times 2$ , 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
- 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)
- 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)
- SEL-487B with Conventional Secondary Inputs (0487B1X4X52XC0XEH9EEEEX, 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
- 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
- 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)
- 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)
- 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
30' 0" Long with no overhang on each end
13' 7" High including base and roof cap (approximate)
Estimated weight including equipment: 52,422 LBS
Roof live load: 20 PSF
Floor live load: 150 PSF
Basic wind speed: 135 MPH

Estimated Weight including equipment 52,

#### **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
- 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
- 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:
  - 7 Sections of Medium Voltage Switchgear
  - 1 Mechanical installation of a circuit breaker test cabinet
  - 2 Wall Mounted HVAC Unit(s)
  - Wall Mounted NEMA 1 Enclosure with Annunciator SEL 2533012130XA2X0 (2533#PGBF)
  - 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
- 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

## <u>Fire Detection System</u> 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 2 2 2 1 1	Fire-Lite Powersonic Fire-Lite Fire-Lite Fire-Lite Fire-Lite Fire-Lite	MS4 Conventional Fire Alarm Panel PS1270 Battery 12 volt 7 amp.hr. Photoelectric Detector with Base Manual Pull Station Alarm Horn Strobe HVAC Controller Relay 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 kVService Voltage:13.2 kVBasic Impulse Level:95 kVPower Frequency Withstand:36 kVVoltage 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
- 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
- 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)
- 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 (T4AQSAP)
- 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:

- AC Panel 208/120VAC, 3 Phase, 4 Wire, 250A Main Bus, 42ckt with 150A Main Breaker, 22kAIC
- 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
- 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
- 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)
  - Wall Mounted NEMA 1 Enclosure with Annunciator SEL 2533012130XA2X0 (2533#PGBF)
  - 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
- 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 2 2 2 1 1	Fire-Lite Powersonic Fire-Lite Fire-Lite Fire-Lite Fire-Lite Fire-Lite	MS4 Conventional Fire Alarm Panel PS1270 Battery 12 volt 7 amp.hr. Photoelectric Detector with Base Manual Pull Station Alarm Horn Strobe HVAC Controller Relay
1 lot	Advantage	Client Relay for SCADA Tie In By Others 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.

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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 kVService Voltage:13.2 kVBasic Impulse Level:95 kVPower Frequency Withstand:36 kVVoltage Range (K factor):1

Short-circuit Current Rating:

Close and Latch Capacity:

Close Voltage:

Trip Voltage:

Frequency:

25 kA rms

65 kA Peak

125 VDC

125 VDC

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
- 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)
- 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 (0487B1X4X52XC0XEH9EEEEX, 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
- 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
- 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)
- 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)
- 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 kVService Voltage:13.2 kVBasic Impulse Level:95 kVPower Frequency Withstand:36 kVVoltage Range (K factor):1

Short-circuit Current Rating:

Close and Latch Capacity:

Close Voltage:

Trip Voltage:

Frequency:

25 kA rms

65 kA Peak

125 VDC

125 VDC

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,  $1/4 \times 2$ , 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
- 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

- 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)
- SEL-487B with Conventional Secondary Inputs (0487B1X4X52XC0XEH9EEEEX, 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
- 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
- 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
- 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 (T4AQSAP)
- 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 kVService Voltage:13.2 kVBasic Impulse Level:95 kVPower Frequency Withstand:36 kVVoltage 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,  $1/4 \times 2$ , 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
- 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

- 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)
- SEL-487B with Conventional Secondary Inputs (0487B1X4X52XC0XEH9EEEEX, 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
- 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 (T4AQSAP)
- 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 kVService Voltage:13.2 kVBasic Impulse Level:95 kVPower Frequency Withstand:36 kVVoltage 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,  $1/4 \times 2$ , 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
- 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

- 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)
- SEL-487B with Conventional Secondary Inputs (0487B1X4X52XC0XEH9EEEEX, 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
- 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)
- 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
- 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)
- 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)
- 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	
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)

				0.10.11.0	
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 )

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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	
Fire Systems - GEORGIA ST T1	
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	
Battery GEORGIA ST T3	
Stairs/Landings Etc GEORGIA ST T3	
Powlvac Switchgear and Accessories T3 SWGR - GEORGIA ST	
Power Control Room (PCR) - GEORGIA STREET WEST PCR	
Fire Systems - GEORGIA ST WEST	
Battery - GEORGIA ST WEST	\$37,493.00
Stairs/Landings Etc GEORGIA ST WEST	
Powlvac Switchgear and Accessories WEST SWGR - GEORGIA ST	
Freight	
Field Service Installation	
	, ,
GEORGIA STREET T1, T3, AND WEST TOTAL	\$4,766,252.00
, _ , _ ,	······································
	<b># # # # # # # # # #</b>
Power Control Room (PCR) - KENNEDY STREET T11 PCR	
Fire Systems - KENNEDY ST T11	
Battery - KENNEDY ST T11	
Stairs/Landings Etc KENNEDY ST T11	
Powlvac Switchgear and Accessories T11 SWGR - KENNEDY ST	
Freight	
Field Service Installation	\$36,728.00
KENNEDY STREET T11 TOTAL	\$1,831,032.00



# REFERENCE: Georgia, Kennedy and College St Substations

GRAND TOTAL	\$12,292,522,00
COLLEGE ST. TOTAL	\$5,695,238.00
Field Service Installation	\$80,411.00
Freight	\$80,157.00
3000A, 15kV Bus 3	\$157,981.00
3000A, 15kV Bus 2 w.T2	\$223,625.00
3000A, 15kV Bus 1 w.T1	\$164,210.00
Powlvac Switchgear and Accessories WEST SWGR - COLLEGE ST	\$1,580,311.00
Powlvac Switchgear and Accessories NW SWGR - COLLEGE ST	\$1,616,096.00
Powlvac Switchgear and Accessories EAST SWGR - COLLEGE ST	\$1,792,447.00

## 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 subsupplier.



# 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:

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 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

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

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



#### 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 Are 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 LLC Company's Address: 202 West Enterprise Rd Winneconne WI 54986 License Number: \_ Phone Number: 920-582-7277 FAX No: 920-682-7270 Email Address: Doloma Switchger power, com **BID SECURITY REQUIREMENTS** TERM OF CONTRACT None required One Time Purchase Certified Check or Bond Five Percent (5%) Term --Other, Specify - Project Completion SECTION 255.05, FLORIDA STATUTES CONTRACT BOND SAMPLE REQUIREMENTS None required None required Bond required 100% of Bid Award Samples required prior to Bid Opening Samples may be required subsequent to **Bid Opening QUANTITIES** INSURANCE REQUIREMENTS Quantities indicated are exacting Quantities indicated reflect the approximate quantities to be purchased Insurance required Throughout the Contract period and are subject to fluctuation in accordance with actual requirements. PAYMENT DISCOUNTS 1% 20, net 30 2% 10, net 30 Other None Offered Item **BID PRICE** ENTER YOUR BID FOR THE FOLLOWING DESCRIBED ARTICLES OR SERVICES: No. 8 4,231,420.00 Georgia Street 1 \$5,714,275,00 2 College Street \$ 1,542,275,00 3 Kennedy \$ 11,487,970,00 **Total Bid Price** 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. 12/6/24 We have received addenda landwritten Signature of Authorized Officer of Company or Agent Date through Inside Sales

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

### **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 LCC
BUSINESS ADDRESS: 202 W. Enterprise Rd
CITY, STATE, ZIP CODE: WINNE (ONNE WI 54986
TELEPHONE: 920-582-7277 (x+111)
FAX: 920-582-7270
E-MAIL: Doiem@switchgewpower.com
PRINT NAME OF AUTHORIZED REPRESENTATIVE: Doud Diem
SIGNATURE OF AUTHORIZED REPRESENTATIVE OF
TITLE OF AUTHORIZED REPRESENTATIVE: Inside Sales
MINIMUM OLIALIFICATIONS:

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.
  - o 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

Each project reference should include the following:

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Project Reference 1
Company Name: NiPSCO
Company Contact Name: Tim Haan
Company Contact Phone Number: $290-7840$
Company Contact E-Mail Address: THOANC NISOUCCE, COM
Project Completion Date: Multiple On Going
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 [7] No []
Description of Project (include manufacturer name for switchgear, building and breakers used for project):
15KV, 2000 PT, Metal Clad in climate controlled Building
Eaton UCPW Breakers
Project Reference 2
Project Reference 2  Company Name: Fish Energy  Company Contact Name: Anthony Ricci
Company Name: Fist Energy
Company Name: Fist Energy  Company Contact Name: Anthony Ricci  2012 2016 CONTACT  COMPANY NAME: Anthony Ricci  COMPANY NAME: Anthon
Company Name: Tist Energy  Company Contact Name: Anthony Ricci  Company Contact Phone Number: 330-384-5010
Company Name: Tist Energy  Company Contact Name: Anthony Ricci  Company Contact Phone Number: 330-384-5010  Company Contact E-Mail Address:  Project Completion Date: Multiple Jongoing
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 Jongoing
Company Name: F(St Energy)  Company Contact Name: Anthony Ricci  Company Contact Phone Number: 330-384-5010  Company Contact E-Mail Address:  Project Completion Date: My Hyll Jagoing  Where was this project installed? Deliv Jemsylany  Does this project include the design, fabrication, testing, documentation, delivery, and installation of 15kV Class Arc Terminating

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Project Reference 3
Company Name: Allaut
Company Contact Name: David Herzos
Company Contact Phone Number: 108-458-3639
Company Contact E-Mail Address: Device Roy & allianterporgy, Com
Project Completion Date: Multiple Ongoing
Where was this project installed? All OURY WISCONSIA
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):
27KU, 2000 Amp, Metal Clad/Climate controlled House

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

## **LIST OF SUBCONTRACTORS**

JEA Solicitation Nu self-performed by t		iires certain major Subcontractor	rs be listed on this forr	m, unless the work will	be
rejection, and the C	ompany agrees to emplate on the state of the	o submit the required Subcontractors specified be modified subsequent to bid or	below: (Use additional	al sheets as necessary)	
Type of Work	Corporate Name of Subcontractor	Subcontractor Primary Contact Person &	Subcontractor's License Number	Percentage of Work or Dollar	
		Telephone Number	(if applicable)	Amount	

NO Contractors

Address:

Date

LIST OF JSEB SUBCONTRACTORS

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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	
Solidi Alliodik			

ALA

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.



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

## **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 of 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

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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 Employe	e(s) Working on V	endor'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 EMPLOYI	EE(S) / PUBLIC OFF	ICER(S) WITH I	POTENTIAL CONFLICT OF INTI	REST
Name of JEA public officer(s), employee(s), or relati potential conflict of interest. If more than five, atta		nay be a	Relationship of JEA public officer(s relative(s) to vendor's company fro etc.). Please list all that apply:	
1.			у под	
2.				
3.				
4.				
5.				
☐ Vendor has no conflict of interest to report.				
☐ Vendor hereby declares it has not and will not p obtain or maintain a contract.	rovide gifts or hospitali	ty of any dollar val	ue or any other gratuities to any JEA o	officer or employee to
☐ I certify that this Conflict of Interest Disclosure have the authority to so certify on behalf of the Ver		ne and that its con	tents are true and correct to my know	wledge and belief and I
Vendor's Authorized Representative Signature:			Date:	
		=		
	FOR JEA USE	ONLY IF CONFLIC	TNOTED	
	This form	has been reviewe	ed by:	
Name of JEA Ethics Officer:	-	Signature:		Date:

Note:

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

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	\$1,439,960.00	\$1,439,960.00
		Distribution Center, NEMA 3R Outdoor Construction		
		Per The Description and BOM Listed Below.		
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 galvanneal 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, 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

### 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 tp 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 = ((PPI at time of SPS Release for Manufacturing / PPI at time of SPS Quote) -1) X (SPS Accepted Customer PO Price X 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%.

- 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. <b>West Switchgear</b>	\$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. <b>T3</b> 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. <b>T1</b> 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 galvanneal 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/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 galvanneal 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 galvanneal 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, 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

## **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 tp 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 = ((PPI at time of SPS Release for Manufacturing / PPI at time of SPS Quote) -1) X (SPS Accepted Customer PO Price X 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%.

- 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 Descrip		Description	otion Unit Price		
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. <b>East Switchgear</b>	\$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

## 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 galvanneal 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, 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

# 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, 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

## 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 galvanneal 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, 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

# 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 galvanneal 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, 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

# 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 tp 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. Price Escalation Change Order = ((PPI at time of SPS Release for Manufacturing / PPI at time of SPS Quote) -1) X (SPS Accepted Customer PO Price X 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%.

- 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	

#### **REQUEST FOR PROPOSAL & BID FORM**

VILLAGES OF WESTPORT

JEA Off Site 20" Force Main Transmission Line

For

Lennar Homes Jacksonville Florida 9440 Philips Highway, Suite 7 Jacksonville, Florida 32256

DUE DATE

March 11, 2024 at 9am

To: Lennar Homes Jacksonville

From: Jax Dirtworks Inc.

In accordance with the plans and specifications, this Request for Proposal is for the <u>JEA Off Site Force Main Transmission Line</u> work for the future <u>Villages of Westport, Ph 5A-5E</u>. The project is in Duval County of Jacksonville, FL along the intersection of I295 and Lem Turner Road. The undersigned proposes to construct all work as shown on the plans prepared by <u>England-Thims & Miller</u>, Inc dated 08/18/2023 and as approved by JEA on 11/14/2023. and Geotechnical Reports by <u>ECS Florida</u>, LLC and in accordance with the <u>Duval County</u>, JEA, ACOE/FDEP, FDOT and the SJRWMD permits.

The Project plans, specifications and RFP package will be available and may be obtained by accessing the Box link <a href="https://lennar.box.com/s/8eumgkd8s1fbx54q5ocpj2v22ddlqlaz">https://lennar.box.com/s/8eumgkd8s1fbx54q5ocpj2v22ddlqlaz</a> which is provided in the Invitation to Bid. No hard copies of plans will be distributed from Consultants or Lennar. All Requests for Additional Information (RFI) shall be made in writing emailed to the engineer Scott Wild at WildS@etminc.com with a copy to the Director of Land Development at Ginny.Feiner@Lennar.com.

All bids shall include coordination of construction with others, including but not limited to, Owners Testing consultants and soft utilities.

Schedule - Time is of the essence for the construction of this project. The Contractor shall prepare its bid based on a construction schedule to be included with the bid package. The Contractor's schedule shall include an accurate timeline of the SOV to include Substantial completion, as-built submittal and Final JEA, County and FDOT acceptance. The Notice to Proceed is anticipated to be issued by <u>03/25/24</u>. Contractor must mobilize and commence earthwork within 10 business days from NTP.

### **BASIS OF COST BREAKDOWN**

- 1. MOBILIZATION, GENERAL CONDITIONS, SITE PREP Includes the preparatory work and operations in mobilizing, demobilization, general conditions, overhead, profit and insurance. This will include any site preparation necessary for construction. This item will be paid for on an average cost through the life of the contract.
- 2. EROSION, SEDIMENT CONTROL AND SWPP Includes all measures that are required to comply with the most current version of the State of Florida Erosion and Sediment Control Designer and Reviewer Manual, FDEP, Duval and SJRWMD water quality standards. This includes, but is not limited to silt screens, hay bales, sodding, settling ponds or other such measures that shall prevent the discharge of turbid waters from the site and minimize erosion of all graded areas. This item includes all measures necessary to meet agency quality standards and. Contractor is responsible for all offsite water discharge testing for turbid water. Contractor will coordinate all testing. The contractor is ultimately responsible for any and all turbid water and off-site discharge. All deficiencies must be repaired in seven days or less, or, the contractor must provide in writing why the deficiencies cannot be addressed with in the seven-day limit. Failure to correct a deficiency in the first seven days will result in a written warning. If the deficiency is not corrected after fourteen days, the Owners Representative will make the repair and the Contractor will be back charged for the cost of the repair and a \$500.00 fine for each line item not addressed. On or before final acceptance of the site, Contractor shall ensure that silt fence is properly installed in all non- stabilized areas though out the site prior to demobilization. Silt fence shall be removed, and trench properly backfilled in all stabilized areas not adjacent to lot pads as directed by Lennar Homes, LLC. Any fines imposed by any agency shall be the responsibility of the Contractor.

Notice of Intent (NOI) to be filed by the Owner's Representative. The contractor shall adhere to all Federal rules and regulations regarding the National Pollutant Discharge Elimination System (NPDES) for construction and ground water discharge. The Storm Water Pollution Prevention Plan (SWPPP) included in these plans shall establish the minimum requirements allowed. The contractor shall implement additional measures, as required, to ensure compliance with the NPDES requirements. Contractor shall provide specifications and shop drawings on all material to be used as part of the SWPPP. Contractor and all subcontractors shall sign SWPPP and SWPPP documentation will be maintained by the Owner or Owner's Representative.

3. CLEARING GRUBBING AND DEMOLITION - Includes complete clearing and grubbing and burning (if allowed) and removal of all brush, roots, stripping. This shall include the demolition and disposal of any below or above ground debris encountered, in accordance with government standards and specifications. Special care shall be taken to ensure preservation of all, natural vegetative buffers and tree preservation areas indicated on the plans, including tree fencing as necessary.

- 4. EARTHWORK EXCAVATION AND GRADING All fill shall be clean structural fill placed in 12" lifts to the specified grade as shown on the grading plans. Elevations shown on the plans shall be minimum grades and areas shall be turned over within 0.1'of design grade. All fill material placed shall be clean fill suitable for structural use where required and compacted with the appropriate compaction equipment to 95 percent of the soil's modified Proctor Maximum Density (AASHTO T-180). Minimum one (1) density test per 5,000 s.f. per lift. Testing will be contracted by Owner however the Contractor must coordinate all testing. Any unsuitable material shall be hauled and disposed of off site.
- **5. SEEDING AND MULCHING AND SOD** The <u>Contractor</u> shall be responsible for all sod, seed and mulch per the plans. Contractor shall install the required 3 ft. sod strip along the curb of all proposed subdivision right of- ways, and where applicable as shown on the plans. Contractor shall be responsible to maintain areas that are shown to be sodded prior to starting work.

#### 6. AS BUILTS

<u>PAVING AND-DRAINAGE AS-BUILTS</u> - Includes the preparation and submittal of all as-builts as required by <u>Duval County</u>, FDOT and SJRWMD.

<u>WATER, AND SEWER AS-BUILTS</u> - Includes the preparation and submittal of all utility as-builts including, force main and all crossings, as required by <u>JEA</u>.

- **7. ROADWAY** Contractor shall be required to mill, resurface, overlay roads and restore any sidewalks, driveways and curbing as shown on the plans or as damaged during construction in accordance with COJ, FDOT standards specifications.
- **8. FORCE MAIN SYSTEM** Includes the construction of the 20" Force Main and connection to the existing line, stub outs valves, fittings, restrained joints, sleeves, air release valves, required borings, pressure testing, locate wires and appurtenances, accessories necessary to complete the installation, replacement of unsuitable backfill, access road, dewatering, concrete work, site grading, sodding, fencing, erosion control, protection of other utilities, and testing and other items not specifically mentioned, but necessary for complete and operable system as shown on the drawings and specifications and in accordance with JEA and FDEP requirements.

#### PER PLAN FOR 20" FORCE MAIN

1.	MOBILIZATION,	GC AND	SITE	PREP,	MOT

- 2. EROSION, SEDIMENT CONTROL AND SWPPP
- 3. CLEARING, GRUBBING & DEMO
- 4. EARTHWORK AND GRADING
- 5. SEEDING AND MULCHING AND SOD
- 6. AS-BUILTS
- 7. ROADWAY
- 8. FORCE MAIN
- 9. PAYMENT & PERFORMANCE BOND

#### **TOTAL**

\$ 146,015.18	_
\$ 106,250.10	

- \$ 1869.45
- \$ 98,324.60
- \$ 21,946.62
- \$ 30,250.00
- \$ 46,775.02
- \$ 2,882,919.51
- \$ 86,659.35

#### **TOTAL CONTRACT COST FOR 20" FORCE MAIN**

**\$** 3,421,009.83

#### BID ALTERNATE FOR 12" FORCE MAIN IN LIUE OF 20"

# 1. MOBILIZATION, GC AND SITE PREP, MOT

- 2. EROSION, SEDIMENT CONTROL AND SWPPP
- 3. CLEARING, GRUBBING & DEMO
- 4. EARTHWORK AND GRADING
- 5. SEEDING AND MULCHING AND SOD
- 6. AS-BUILTS
- 7. ROADWAY
- 8. FORCE MAIN
- 9. PAYMENT & PERFORMANCE BOND

#### **TOTAL**

\$	78,174.09
\$	106,250.10
\$	1869.45
_	

- \$ <u>98,324.60</u> \$ <u>21,946.62</u>
- \$ 30,250.00
- \$ 46,775.02
- \$ 1,862,062.32
- \$ 0.00

#### **TOTAL CONTRACT COST FOR 12" FORCE MAIN**

**\$** 2,245,652.20

#### LENNAR HOMES, LLC VILLAGES OF WESTPORT OFF SITE - 20 Inch FORCE MAIN 2/2/2024

DESCRIPTION	QTY	UNIT	ι	JNIT PRICE		TOTAL
MOBILIZATION					·	
Mobilization & General Conditions	1	LS LS	\$	100,290.49	\$	100,290.49 86,659.35
Payment & Performance Bond  Maintenance of Traffic	1	LS	\$	86,659.35 9,424.69	\$	9,424.69
SUBTOTAL			ı,	3, 12 1.03	\$	196,374.53
EROSION / SWPPP MAINTENANCE						
Construction Entrance	1	EA	\$	3,642.10	\$	3,642.10
Single Row Silt Fence Installation	19520	LF	\$	1.51	\$	29,524.00
Double Row Silt Fence Installation	0	LF	\$	-	\$	-
Silt Fence Maintenance	19520	LF	\$	-		incl.
Turbidity Barrier	4080	LF	\$	6.05	\$	24,684.00
Erosion Control NPDES Street Sweeping	1	LS LS	\$	9,075.00 3,025.00	\$	9,075.00 3,025.00
Dust Control / Water Truck	1	LS	\$	36,300.00	\$	36,300.00
SUBTOTAL		- 13	7	30,300.00	Ś	106,250.10
CLEARING & GRUBBING					Ť	100)250110
Demolition	1	EA	\$	1,869.45	\$	1,869.45
SUBTOTAL					\$	1,869.45
EARTHWORK / EXCAVATION / GRADING						
Stripping	12956	CY	\$	0.96	\$	12,390.40
Place and Compact fill	2835	CY	\$	1.28	\$	3,630.00
Import Fill	2835	CY	\$	11.65	\$	33,033.00
Export Fill Dressing Final Grading	570 25911	CY SY	\$	60.97 0.56	\$	34,751.20 14,520.00
SUBTOTAL	25911	31	ş	0.56	¢	98,324.60
SEED / SOD					Ą	38,324.00
Seed & Mulch Disturbed Area	25911	SY	\$	0.85	\$	21,946.62
SUBTOTAL					\$	21,946.62
SURVEY & ASBUILTS						
Survey & Layout	1	LS	\$	36,300.00	\$	36,300.00
Utility Asbuilts	1	LS	\$	27,830.00	\$	27,830.00
P&D Asbuilts	1	LS	\$	2,420.00	\$	2,420.00
SUBTOTAL					\$	66,550.00
ROADWAY Limerock Base	55	SY	\$	68.13	\$	3,747.37
Mill & Resurface and Overlay	333	EA	\$	109.95	\$	36,614.25
Sidewalk Typical	100	SF	\$	24.20	\$	2,420.04
Misc. Bricks, Bollards, Columns	8	EA	\$	121.00	\$	968.00
Case X Repair	55	EA	\$	55.01	\$	3,025.36
SUBTOTAL					\$	46,775.02
FORCE MAIN			,			
Connect to Existing	1	EA	\$	38,185.42	\$	38,185.42
20" PVC DR25	10160	LF	\$	94.80	\$	963,189.11
24" HDPE DR11	2500	LF	\$	122.79	\$	306,973.44
12" Gate Valve w/Box 20" Gate Valve w/Box	1 18	EA EA	\$	7,438.03 18,751.47	\$	7,438.03 337,526.40
20" Fittings / Bends / Restraints / Tees	1	LS	\$	264,672.98	\$	264,672.98
24" HDPE Adapters / Fittings / Bends, etc.	1	LS	\$	75,942.99	\$	75,942.99
Air Release Valve Assembly	7	EA	\$	8,351.27	\$	58,458.92
Air Release Manhole	7	EA	\$	10,769.79	\$	75,388.51
12" Plug	1	EA	\$	1,761.31	\$	1,761.31
20" Plug	1	EA	\$	2,690.05	\$	2,690.05
Directional Drill #1	1	EA	\$	105,890.13	\$	105,890.13
Directional Drill #2	1	LS	\$	90,008.88	\$	90,008.88
Directional Drill #3	1	LS	\$	278,617.63	\$	278,617.63
Directional Drill #4 Locate Wire Test	1	LS LS	\$	125,401.38 16,149.94	\$	125,401.38 16,149.94
Pressure Test	1	LS	\$	30,679.35	\$	30,679.35
Dewatering	1	LS	\$	103,945.05	\$	103,945.05
Alternate Directional Drill Wetland #1	1	LS	\$	88,896.47	\$	88,896.47
Alternate Directional Drill Wetland #2	1	LS	\$	97,786.12	\$	97,786.12
Alternate Directional Drill Wetland #3	1	LS	\$	88,896.47	\$	88,896.47
Alternate Directional Drill Wetland #4	1	LS	\$	200,017.06	\$	200,017.06
Alternate Directional Drill Wetland #5	1	LS	\$	168,903.30	\$	168,903.30
SUBTOTAL					\$	3,527,418.93
TOTAL COST OF CONSTRUCTION					\$	4,065,509.25

# LENNAR HOMES, LLC VILLAGES OF WESTPORT BID ALTERNATE OFF SITE - 12 Inch FORCE MAIN 2/2/2024

DESCRIPTION QTY UNIT UNIT PRICE MOBILIZATION 68,749.40 Mobilization & General Conditions 68,749.40 Maintenance of Traffic LS 9.424.69 9,424,69 78,174.09 EROSION / SWPPP MAINTENANCE Construction Entrance EΑ 3,642.10 3.642.10 19520 Single Row Silt Fence Installation LF 29,524.00 4080 urbidity Barrier 6.05 Erosion Control NPDE LS 9,075.00 9,075.00 3.025.00 Street Sweeping LS 3.025.00 Dust Control / Water Truck LS 36,300.00 36,300.00 SUBTOTAL 106,250.10 CLEARING & GRUBBING EA \$ 1,869.45 \$ 1,869.45 SUBTOTAL 1,869.45 EARTHWORK / EXCAVATION / GRADING Stripping 12956 0.96 12,390.40 Place and Compact fill CY 3,630.00 2835 1.28 Import Fill 2835 CY 11.65 33,033.00 Export Fill 570 60.97 34.751.20 Dressing Final Grading 25911 SY 0.56 14.520.00 98,324.60 SEED / SOD Seed & Mulch Disturbed Area
SUBTOTAL 25911 SY \$ 0.85 \$ 21.946.62 21,946.62 SURVEY & ASBUILTS Survey & Layout 36,300.00 36,300.00 Utility Asbuilts LS 27.830.00 27.830.00 P&D Asbuilts LS 2,420.00 2,420.00 66,550.00 ROADWAY Limerock Base Mill & Resurface and Overlay 3.747.37 55 SY 68.13 333 EA 36,614.25 109.95 100 24.20 2,420.04 Sidewalk Typical Misc. Bricks, Bollards, Columns 8 55 EΑ 121.00 968.00 ase X Repair 3.025.36 EA 55.01 46,775.02 SUBTOTAL FORCE MAIN 16,781.84 16.781.84 Connect to Existing FA 16" HDPE DR 11 2500 LF 232,159.35 92.86 2" PVC DR18 10180 LF 65.80 669,803.69 12" Gate Valve w/Box 19 EΑ 5.405.13 12" Fittings / Bends / Restraints / Tees LS 69,262,70 69.262.70 16" HDPE Fittings / Bends / Restraints / Tees LS 34,339.80 34,339.80 Air Release Valve Assembly EΑ 7,990.96 55,936.73 Air Release Manhole FΑ 10,769.79 75,388.51 12" Plug Directional Drill #1 EΑ 2,256.89 2,256.89 72,901.29 72,901.29 Directional Drill #2 LS 61,356.08 61,356.08 Directional Drill #3 LS 194,027.13 194,027.13 Directional Drill #4 LS 88,076.51 88,076.51 Locate Wire Test LS 16,149.94 16,149.94 Pressure Test LS 30 679 35 30.679.35 Dewatering LS 103,945.05 103,945.05 Alternate Directional Drill Wetland #1 LS 59,241.19 59,241.19 lternate Directional Drill Wetland #2 1 LS 65,165.31 65,165.31 Alternate Directional Drill Wetland #3 LS 59,241.19 59,241.19 133,292,68 Alternate Directional Drill Wetland #4 LS 133,292,68 LS 112,558.26 ternate Directional Drill Wetland #5 SUBTOTAL 2,255,260.96 ADDITIONAL ITEMS NOT CAPTURED ABOVE SHOULD BE LISTED HERE TOTAL COST OF CONSTRUCTION \$ 2,675,150.83

## Virginia Feiner

From: Nick Kausch <Nick@jaxdirtworks.com>
Sent: Thursday, March 28, 2024 12:53 PM

**To:** Virginia Feiner

**Cc:** Ben Taylor; Jennifer Holdeman **Subject:** RE: Villages of Westport Offsite

#### This Message Is From an External Sender

This message came from outside your organization.

Report Suspicious

Do you need it broken out. Looking back at the SOV I see where Ben used the bollards line item and then just spread the other costs over everything since there wasn't a line item for "monument" and "cattle pen". It is included though.

Nick Kausch

GM

Jax Dirtworks Inc.

310 Mealy Drive, Atlantic Beach, FL 32233 Office: (904) 683-3124 | Cell: (908) 812-9178

www.jaxdirtworks.com



From: Virginia Feiner < Ginny. Feiner @ Lennar.com >

**Sent:** Thursday, March 28, 2024 10:45 AM **To:** Nick Kausch < Nick@jaxdirtworks.com>

Cc: Ben Taylor <BenT@jaxdirtworks.com>; Jennifer Holdeman <jennifer@jaxdirtworks.com>

Subject: RE: Villages of Westport Offsite

One thing I do need from you guys is the price to rebuild the cattle corral and the VC Johnson Monument that will be impacted.

Thank you,

Ginny Feiner Director Land Development

LENNAR

Ginny.Feiner@Lennar.com Mobile: 904-445-6675

7411 Fullerton Street 2<sup>nd</sup> Floor, Ste 220 Jacksonville, FL 32256

#### **GENERAL NOTES:**

- 1. The Contractor shall submit a detailed construction schedule with the bid proposal that outlines time frames for <u>major</u> work items. This schedule will be used in bid evaluation.
- 2. The Contractor is required to perform all required Utility testing for the JEA prior to project acceptance.
- 3. The Contractor is responsible for visually inspecting the entire site prior to submitting bids and notifying the Engineer of discrepancies, which may affect the construction and its cost.
- 4. The selected Contractor will be required to submit an itemized AIA application with detailed schedule of values outlining all work items that will be used for monthly pay requests and change orders.
- 5. Each phase (if needed) of the project is to be built in the order specified. Bidder is to use the completion dates to determine overall start date of each phase while maintaining cost effective practices. Lennar reserves the right to award each phase at a time. Contractor will honor prices for up to thirty (30) days from awarding contract.
- 6. Standard contract documents as provided by the Owner will be used for the Contract and General Conditions.
- 7. Stub out all utilities beyond pavement edge as needed to continue into next phase and not disturb pavement of previous phase (if needed).
- 8. The Owner will only provide the following survey work for the Contractor. All other necessary survey work must be provided by the Contractor.
  - a. Project Benchmark
  - b. Roadway Center Points
- 9. The Contractor shall be responsible for coordinating all work necessary with all utility companies.
- 10. The Contractor shall be responsible for coordinating the work necessary to complete all final approvals and acceptances.
- 11. Contractor shall complete his work in a professional and workman like manner typical of his industry. There shall be no sections or parts missing. Further, the work shall be complete and able to function for its intended use. The work must be continuous.
- 12. All storm drainage must be maintained to each property owner during construction. If this does not occur, the Contractor will be responsible for any damage that may result.
- 13. Burning of clearing debris generated on this project area may be burned as allowed by the regulating agencies.

- 14. Water and Sewer As Built must include elevation on all water/storm and water/sanitary crossing.
- 15. Building Pads will be constructed as follows:
  - a. All single family lots will be 10 inches below FFE
  - b. Maximum pad depths without exceed a 4:1 rear slope, unless otherwise shown on plans.
- 16. The Contractor shall specify all subcontractors to be used for major work items i.e. water, sewer, paving and drainage.
- 17. Billing The contractor must apply for all payments using the Build-Pro / Supply Pro System. An AIA payment application certified by the engineer must also be uploaded to SupplyPro or e-mailed to Lennar's Land Development Manager. The Contractor shall also provide partial lien releases for any NTO AND any supplier or sub that is on the list of suppliers/sub-contractors.
- 18. Contractor shall secure and pay for all paving and drainage construction permits, building permits, right—of way construction permits, county "clearance sheet" permit, electrical permit, water and electrical meters (if applicable), installation fees, electrical inspection fees, if any required.
- 19. The undersigned Contractor has visited the Site, examined and read all Plans, Specifications, General and Special Conditions, and other Contract Documents and all Addenda thereto; and is acquainted with and fully understands the extent and character of the work covered by this Proposal and the specified requirements for the proposed work and submits this Bid with no unanswered questions.
- 20. The undersigned Contractor certifies that he has carefully examined the foregoing Proposal after the same was completed and has verified every item placed thereon; and agrees to indemnify, defend and save harmless the Owner and/or Engineer against any cost, damage or expense which may be incurred by any error in his preparation of same.
- 21. The undersigned Bidder agrees to submit completed bids to the Owner for review no later that the due date indicated on the bid form.
- 22. The undersigned Bidder agrees that he understands the following items:

If this Proposal is accepted by the Owner, the undersigned agrees to keep the bid in effect for thirty (30) calendar days from the bid opening/due date.

The Owner reserves the right to reject any or all Bids, waive informalities in any Bid, make award in part of whole with or without cause, and to the award in what is deemed to be the best interest of the Owner.

If awarded the Contract, the undersigned agrees to begin work within ten (10) calendar days after executing the contract and complete the improvements in accordance with the schedule shown.

The following documents are attached to and made a condition of this Bid:

- A. Attachment A JEA Minimum Qualifications
- B. Attachment B JEA Bid Affidavit
- C. Attachment C JEA Addenda Acknowledgement
- D. Attachment D List of Subs and Suppliers
- E. Attachment E Certificate of Compliance with Florida Trench Safety Act
- F. Attachment F RFP Evaluation Criteria

# $Attachment \ A-Minimum \ Qualifications$

Company Name: <u>Jax Dirtworks</u>		
Company's Address: <u>310 Mealy Drive A</u>	tlantic Beach, Florida 32233	
License Number: CGC1524338		
Phone Number: <u>904-683-3124</u> FAX No	o: Email Address: _bent	@jaxdirtworks.com
BID SECURITY REQUIREMENTS  None required Certified Check or Bond (Five Percent (5))	Other, Specify - Pro	e nts oject Completion
SAMPLE REQUIREMENTS  None required Samples required prior to Bid Opening Samples may be required subsequent to Bid Opening	SECTION 255.05, FLORIDA ST  None required  X Bond required - 100% Paymen	ATUTES CONTRACT BOND  nt and Performance due at Contract Award
QUANTITIES		INSURANCE REQUIREMENTS
Quantities indicated are exacting Quantities indicated reflect the approxim Throughout the Contract period and are subj with actual requirements.	ate quantities to be purchased ect to fluctuation in accordance	Insurance required
PAYMENT DISCOUNTS		
☐ 1% 20, net 30 ☐ 2% 10, net 30 ☐ Other ☐ None Offered		
ENTER YOUR BID FOR SOLICITAT	ΓΙΟΝ – VILLAGE OF WESTPORT	TOTAL BID PRICE
	JEA Off Site 20" FM	\$3,978,849.90
	P&P Bond	\$86,659.35
There was and understood the	Cunching Law/Dublic Decords a	\$4,065,509.25
☑ I have read and understood the solicitation. I understand that in the public "as-is".		
	BIDDER CERTIFICATION	
By submitting this Bid, the Bidder certifies the person signing below is an authorized rebusiness in the State of Florida, and that the (if applicable). The Bidder also certifies that Ethics) of this Solicitation.	presentative of the Bidding Company, tha Company maintains in active status an ap	at the Company is legally authorized to do oppropriate contractor's license for the work
We have received addenda	Mandwritten Signature of Authorized Of	3/8/2024  Fircer of Company or Agent Date
_1through _ 2	<i>y</i>	1 / 5
	Jennifer Holdeman CEO	
	Printed Name and Title	

### Attachment A – Minimum Qualifications

#### **Minimum Qualifications**

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.

#### MINIMUM QUALIFICATIONS:

**BIDDER INFORMATION** 

Bidder shall have the following Minimum Qualifications to be considered eligible to submit a Bid in response to this Solicitation.

- (1) Proposer shall be required to provide evidence of \$10,000,000 minimum bonding capacity from a Surety Company acceptable to Owner.
- (2) Proposer and its sub-contractors shall provide proof of insurance in an amount to or exceeding the following:
  - o Workers Compensation \$1,000,000
  - o General Liability Insurance \$1,000,000/\$2,000,000 annual aggregate
  - o Automobile Liability Insurance \$1,000,000 each occurrence
  - o Excess or Umbrella Liability in addition to GL with \$2,000,000 each occurrence
  - O Such insurance shall be obtained for contractor and sub-contractors written by companies licensed to do business in the State of Florida with a A++ Rating upon contract award.
- (3) Proposer will have constructed three (3) projects similar in quality and scope of a minimum of \$5,000,000 each in completed construction over the last ten (10) years.
- (4) Proposer is a licensed underground utility contractor in the State of Florida for a minimum of ten (10 years;
- (5) Proposer is eligible to do business with JEA.

# Attachment A – Minimum Qualifications

### Reference 1

Primary Nature of Service Provided Site Work
Reference Name Christian Pratten
Reference Phone Number 904-522-7129
Reference E-Mail Address Cpratten@bencoconstructionllc.com
Contract Start Date 6/14/22
Contract End Date 4/14/24
Contract Value (Dollars) \$_5,548,666.00
Description of Project Fountains Apartments - Full Site and Civil work for a new building apartment
complex in St Johns County. Clear site, import fill, and grade site. Install new stormwater system,
gravity sewer, water, and fire. Build new parking lot.

# Attachment A – Minimum Qualifications

### Reference 2

Primary Nature of Service Provided <u>Site Work</u>	
Reference Name David Crosby	
Reference Phone Number 904-686-3477	
Reference E-Mail Address aubrey.crosby@pulte.com	
Contract Start Date 7-26-22	
Contract End Date 6-11-23	
Contract Value (Dollars) \$ 7,084,418.00	
Description of Project Wells Landing Subdivision - Strip and grade site. Place and compact impor	t fill,
construct building pads. Excavate stormwater retention facility, install stormwater system. Install	<u> </u>
gravity sewer, lift station, and forcemain. Furnish and install 2300' 12" offsite watermain to feed	
community and future developments. Install potable and reuse services. Construct new asphalt	roads
and sidewalks.	

# Attachment A – Minimum Qualifications

## Reference 3

Primary Nature of Service Provided <u>Site Work</u>
Reference Name Wally Rock
Reference Phone Number 904-268-5515
Reference E-Mail Address wally.rock@summitcmgroup.com
Contract Start Date 1-2-23
Contract End Date 7-10-23
Contract Value (Dollars) \$ 1,901,204.00
Description of Project RCSA Bayard - New charter school project. Strip and clear site, excavate
retention pond, and export excess fill. Furnish and install new stormwater system, including road
crossing beneath active forcemain. Install new fire and water service to building. Construct new parking
lot, bus loop, and sidewalks.

# **BID AFFIDAVIT**

# ATTACHMENT B

PROJECT: VILLAGES OF WESTPORT – JEA OFF SIT	E 20" FORCE MAIN TRANSMI	SSION LINE
FOR: LENNAR HOMES, LLC AND JEA		
***********	*********	********
At the time the proposal is submitted, the Bidder	shall attach to his Bid a sworn	statement.
This sworn statement shall be an affidavit in the association, or corporation submitting the propauthorized by law to administer oaths.		
************	*********	******
STATE OF Florida		
COUNTY OF Duval		
Before me, the Undersigned authority, personally	appeared	
who being duly sworn, deposes and says he/she is Jax Dirtworks Inc,	CEO (Title)	of
(Firm)		
the Bidder submitting the attached proposal for th	e work covered by the Docume	ents in the Project Manual
The affiant further states that no more than or submitted from the individual, his firm or corpora Bidder has no financial interest in the firm of a association or corporation has neither directly, no any collusion, or otherwise taken any action in rethis firm's Bid on the above-described project.	ation under the same or differ another bidder for the same r indirectly entered into any a	rent name, and that such work. That he, his firm, greement, participated in
Sworn and Subscribed to me this 8th	day of March	,2024 .
By: _Jennifer Holdeman	CEO	
Notary Public:	(Title)	Notary Public State of Florida     Meredith Kneece     My Commission HH 125725
My Commission Expires: 05/03/2025		Expires 05/03/2025

# ATTACHMENT C ADDENDA ACKNOWLEDGMENT:

Bidder acknowledges receipt of the following	g addendum:
Addendum No. 1 Date: 2-26-24	Acknowledged by:Ben Taylor
Addendum No. 2 Date: 2-26-24	Acknowledged by: Ben Taylor
Addendum No Date:	Acknowledged by:
Addendum No Date:	Acknowledged by:
	Jennifer Holdeman
President	Name of Bidder
	gen Holl CEO
Secretary	Signature and Title
	904-683-3124
Treasurer	Business Telephone
If Corporation, affix Corporate Seal	Emergency Telephone
	310 Mealy Drive Atlantic Beach
	Business Address
_CGC1524338	Florida 32233
License No.	State and Zip Code

Previous Experience Together:

# ATTACHMENT D LIST OF PROPOSED SUBCONTRACTORS & SUPPLIERS

ormation as

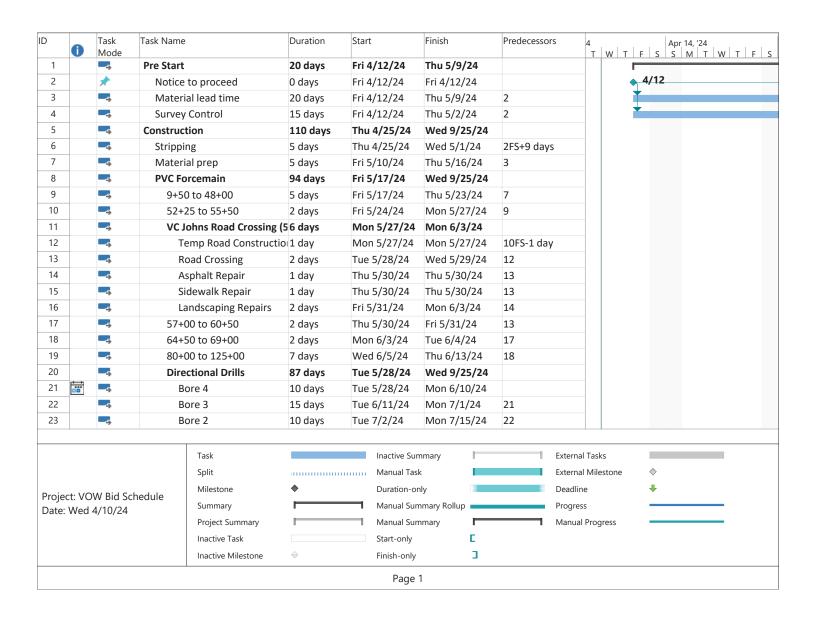
List shall include the name of each Subcontractor or Suppliers.
Indicate percentage of Contract Price for each subcontractor listed. Attach additional infoneeded.
Subcontractor No. 1
Name: Ferguson Waterworks
Description of Work: Pipe Supplier
Percent of Contract Price:48%
Previous Experience Together:10 years
Subcontractor No. 2
Name: TB Landmark
Description of Work: Directional Drill Subcontractor
Percent of Contract Price: 13%
Previous Experience Together: 5 years
Subcontractor No. 3
Name:
Description of Work:
Percent of Contract Price:
Previous Experience Together:
Subcontractor No. 4
Name:
Description of Work:
Percent of Contract Price:

# ATTACHMENT E CERTIFICATE OF COMPLIANCE WITH FLORIDA TRENCH SAFETY ACT

Bidder acknowledges that he is solely responsible for complying with the Florida Trench Safety Act (ACT) and Occupational Safety and Health Administrations excavation safety standard 29 CFR 1926.650 (Subpart P as amended). Bidder further acknowledges that included in the various items of the proposal and in the Total Aggregate Lump Sum Bid Price are costs for complying with the Florida Trench Safety Act (90-96, Laws of Florida) effective October 1, 1990 and the Occupational Safety and Health Administrations excavation safety standard.

Bidder:	Jax Dirtworks Inc.	
Date: _	3/8/2024	
Authori	zed Signature:	

NOTE: This form must be completed and attached to the Bidder's Bid Proposal



)	0	Task Mode	Task Name		Duration	Start	Finish	Predecesso		Apr 14, '24  F S S M T W T F
24			Во	ore 1	10 days	Tue 7/16/24	Mon 7/29/24	23	1 00	1 3 3 141 1 44 1 1
25		-5	W	etland 1	10 days	Tue 7/30/24	Mon 8/12/24	24		
26		<b>-</b> 5	W	etland 2	7 days	Tue 8/13/24	Wed 8/21/24	25		
27		<u>_</u>	W	etland 3	8 days	Thu 8/22/24	Mon 9/2/24	26		
28		<b>-</b> 5	W	etland 4	7 days	Tue 9/3/24	Wed 9/11/24	27		
29		<u>_</u>	W	etland 5	7 days	Thu 9/12/24	Fri 9/20/24	28		
30			Ti	e In Drill 4	1 day	Thu 6/13/24	Thu 6/13/24	48		
31		<b>-</b> -5	Ti	e In Drill 3	1 day	Thu 7/4/24	Thu 7/4/24	47		
32		<b>_</b>	Ti	e In Drill 2	1 day	Thu 7/18/24	Thu 7/18/24	46		
33			Ti	e In Drill 1	1 day	Thu 8/1/24	Thu 8/1/24	45		
34		-3	Ti	e In Wetland 1	1 day	Thu 8/15/24	Thu 8/15/24	49		
35		<u>_</u>	Ti	e in Wetland 2	1 day	Mon 8/26/24	Mon 8/26/24	50		
36		-	Ti	e in Wetland 3	1 day	Thu 9/5/24	Thu 9/5/24	51		
37		-5	Ti	e in Wetland 4	1 day	Mon 9/16/24	Mon 9/16/24	52		
38		4	Ti	e in Wetland 5	1 day	Wed 9/25/24	Wed 9/25/24	53		
39		-	Closeout		94 days	Fri 5/24/24	Wed 10/2/24			
40		-	Pre Pre	ssure Test	88 days	Fri 5/24/24	Tue 9/24/24			
41		4	Pre I	Pressure Test Section	5 days	Fri 5/24/24	Thu 5/30/24	9		
42		4	Pre I	Pressure Test Section :	5 days	Mon 6/3/24	Fri 6/7/24	17		
43		4	Pre I	Pressure Test Section	5 days	Wed 6/5/24	Tue 6/11/24	18		
44		4	Pre I	Pressure Test Section	5 days	Fri 6/14/24	Thu 6/20/24	19		
45		4	Pres	sure Test Drill 1	2 days	Tue 7/30/24	Wed 7/31/24	24		
46		-5	Pres	sure Test Drill 2	2 days	Tue 7/16/24	Wed 7/17/24	23		
				Task		Inactive Sun	nmary		External Tasks	
				Split			,		External Milestone	<b>♦</b>
				Milestone	<b>♦</b>	Duration-or	nly		Deadline	+
,		W Bid Sc	hedule	Summary			nmary Rollup		Progress	
ate: \	/Ved	4/10/24		Project Summary		Manual Sun			Manual Progress	
				Inactive Task	_	Start-only		•		
				Inactive Milestone	<b>\Rightarrow</b>	Finish-only	3			
						Page 2				

)		ask 1ode	Task Name	Duration	Start	Finish	Predecessor	-	W T	Apr 14, '24 F   S   S   M   T   W   T   F
47		4	Pressure Test Drill 3	2 days	Tue 7/2/24	Wed 7/3/24	22			
48		4)	Pressure Test Drill 4	2 days	Tue 6/11/24	Wed 6/12/24	21			
49		4)	Pressure Test Wetland 1	2 days	Tue 8/13/24	Wed 8/14/24	25			
50		4	Pressure Test Wetland 2	2 days	Thu 8/22/24	Fri 8/23/24	26			
51		4	Pressure Test Wetland 3	2 days	Tue 9/3/24	Wed 9/4/24	27			
52		4	Pressure Test Wetland 4	2 days	Thu 9/12/24	Fri 9/13/24	28			
53		4)	Pressure Test Wetland 5	2 days	Mon 9/23/24	Tue 9/24/24	29			
54		4)	JEA Pressure Test	5 days	Thu 9/26/24	Wed 10/2/24	38			
55		4)	Asbuilts	45 days	Thu 9/26/24	Wed 11/27/24				
56		4)	Asbuilt Creation	3 wks	Thu 9/26/24	Wed 10/16/24	38			
57		4	1st Review	10 days	Thu 10/17/24	Wed 10/30/24	56			
58		4	Asbuilt Revisions	4 days	Thu 10/31/24	Tue 11/5/24	57			
59		4)	2nd Review	7 days	Wed 11/6/24	Thu 11/14/24	58			
60		4	Asbuilt Revisions	4 days	Fri 11/15/24	Wed 11/20/24	59			
61		-5	3rd Review	5 days	Thu 11/21/24	Wed 11/27/24	60			
62		4	Asbuilt Acceptance	0 days	Wed 11/27/24	Wed 11/27/24	61			
63		-5	Final Walk	5 days	Thu 11/28/24	Wed 12/4/24	62			
					la vita Car			External Tas	lke.	
			Task		Inactive Sum	nmary		External Las	112	
			Task Split			,		External Mil		<b>*</b>
		D. 1 C .	Split Milestone	•			:#			♦
-	t: VOW		Split Milestone	<b>*</b>	Manual Task  Duration-on			External Mil		
_	t: VOW Wed 4/		Split Milestone	<b>*</b>	Manual Task  Duration-on	ly mary Rollup		External Mil	estone	
_			Split Milestone Summary	<b>•</b>	Duration-on  Manual Sum	ly mary Rollup		External Mil Deadline Progress	estone	
-			Split Milestone Summary Project Summary	<b>♦</b>	Manual Task  Duration-on  Manual Sum  Manual Sum	ly Imary Rollup Imary		External Mil Deadline Progress	estone	

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: Va	nTrans tomers
Company's Address 7	111 Imperial Dr. Waro TX 76712
License Number (if applicab	e)
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	Location	Quantity	U/ <b>M</b>	Unit Price	Ext Price	Lead Time After Receipt of Order
Description						
TRAPF006	JEA, SSC	2	EACH	130 300	360,600	32-34 weeks
	Storeroom			1 00, 500	700,000	
TRANSFORMER, 3750KVA,						after approval & release
13200Y/7620 VOLT PRIMARY,		ŀ				i ir
4160Y/2400 VOLT SECONDARY,						
3-PHASE, PADMOUNTED,						
STEPDOWN, (DELIVERY TO BE					1	
SCHEDULED 72 HOURS IN						
ADVANCE OF ARRIVAL, WITH					ŀ	
2325 EMERSON ST. JAX. FL						
32207).						

Appendix B - Bid Form for One-Time Inventory Purchases 1411934848 TRAPF006 - One-Time Purchase for JEA Inventory

The following manufacturers are approved	d: Vendor Comments:
ABB	
Eaton	
VanTran	
See Technical Specifications	
I have read and understood the Summy proposal will be disclosed to the public "a	shine Law/Public Records clauses contained within this solicitation. I understand that in the absence of a redacted copy is-is".
	Respondent's Certification
Respondent's Company, and that the Company is legally	It it has read and reviewed all of the documents pertaining to this Solicitation, that the person signing below is an authorized representative of the authorized to do business in the State of Florida. The Respondent also certifies that it complies with all sections (including but not limited to the Respondent is an authorized distributor or manufacturer of the equipment as required in this Solicitation.
We have received addenda Hand	Written Signature of Authorized Officer of Company or Agent Date
through	dies Auerneck
Duinto	d Name and Title

# Award #7 Supporting Documents 03/20/2025 Qualification Form IFB 1411934848 TRAPF006 - One Time Purchase for JEA Inventory

#### **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.

COMPANY NAME: Vantran Transformers
BUSINESS ADDRESS: 7711 Imperial Dr. Waco Tx 76712
CITY, STATE, ZIP CODE:
TELEPHONE:
E-MAIL: Saks @ vantren. com
PRINT NAME OF AUTHORIZED REPRESENTATIVE: Richard Autowerk
SIGNATURE OF AUTHORIZED REPRESENTATIVE:
NAME AND TITLE OF AUTHORIZED REPRESENTATIVE: Regional Sales Manage

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:

- 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.
- 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:

MINIMUM QUALIFICATIONS FOR SUBMISSION

RESPONDENT INFORMATION

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.
- 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.
- No JEA officer or employee will derive a personal financial gain or loss from this contract.
- 6. No relative of a JEA officer of 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)

	, , , , , , , , , , , , , , , , , , , ,							
	ee(s) Working on Vendor's Current Contract(s) with JEA:							
1411934848 TRAPFOOL Lynn Rix								
Vendor Name:	Vendor Phone:							
Vantran Transformers								
Vendor's Authorized Representative Name and Title:	Authorized Representative's Phone:							
Richard Durwerk, Regional Sales	Mjr. 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 the 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.								
Evendor has no conflict of interest to report.								
☐ Vendor hereby declares it has not and will not provide gifts or hosp employee to obtain or maintain a contract.	itality of any dollar value or any other gratuities to any JEA officer or							
$\Box$ I certify that this Conflict of Interest Disclosure has been examined belief and I have the authority to so certify on behalf of the Vendor.	by me and that its contents are true and correct to my knowledge and							
Vendor's Authorized Representative Signature:	Date:							
The Com	2/24/25							
L.,								
FOR JEA USE ONLY II This form has bee								
Name of JEA Ethics Officer:	Signature: Date:							
Note:								

Date: <u>05/13/2021</u> Item# <u>2</u>



# Formal Bid and Award System

Award #2 5/13/2021

**Type of Award Request:** PROPOSAL (RFP)

**Requestor Name:** Myers, Joseph C. - Mgr Process Chemistry

**Requestor Phone:** 904-665-7333

**Project Title:** Industrial and Lab Gas Supply

**Project Number:** Various – See Attached

Project Location: JEA
Funds: O&M

**Budget Estimate:** FY – Budget \$2,800,000.00

Scope of Work:

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.

JEA IFB/RFP/State/City/GSA#: 1410275453

Purchasing Agent: Lovgren, Rodney

Is this a Ratification?:

#### **RECOMMENDED AWARDEE(S):**

Name	<b>Contact Name</b>	Email	Address	Phone	Amount
			1350 Concourse	(904) 753-	\$2,240,000.00
LLC		@nexair.com	Avenue, Suite 103	4825	<del>+-</del> )
AIRGAS	Seth Stanley	Seth.stanley	Suite 100 259 N.	(813) 883-	
USA LLC		@airgas.com	Radnor-Chester Rd.	4232	\$280,000.00
			Radnor, PA 19087		
MATHESON	Patrick	podonnell@	909 Lake Carolyn	(386) 752-	
TRI-GAS	Odonnell	mathesongas	Parkway Suite 300	9173	\$280,000.00
INC.		com	Irving, TX 75039		

**Amount for entire term of Contract/PO:** \$2,800,000.00 **Award Amount for remainder of this FY:** \$251,000.00

**Length of Contract/PO Term:** Five (5) Years w/Two (2) – One (1) Yr.

Renewals

 Begin Date (mm/dd/yyyy):
 05/30/2021

 End Date (mm/dd/yyyy):
 05/29/2026

**Renewals:** Yes- Two (2) – One (1) Yr. Renewals

**JSEB Requirement:** N/A - Optional

**PROPOSERS:** 

Name	Evaluated Amount	Points	Full Scope Rank	Specific Scope Awarded based on evaluation by scope. Each Supplier was highest evaluated for the listed scope
NEXAIR LLC	\$1,909,077.89	92.9	1	Bulk H, O2, N

MATHESON TRI- GAS INC.	\$1,852,522.61 *	89.0	2	Bulk CO2 (only Bidder)
AIRGAS USA LLC	\$1,895,574.85 *	88.4	3	Bottle Service

<sup>\*</sup> Supplier Price Normalized to support aggregate evaluation. The ranking and scores show single ranking. The Summary evaluation sheet attached shows the three supplier ranking

#### **Background/Recommendations:**

Advertised on 02/09/2021. Three (3) prime companies attended the optional pre-proposal meeting held on 02/16/2021. At proposal opening on 03/23/2021, JEA received three (3) Proposals. Proposals were evaluated on the basis of price and past performance. JEA deemed Nexair, Airgas and Matheson the most responsive to perform the work for the scope of supplier in which each company was the highest evaluated. A copy of the evaluation matrix and Bid Workbooks are attached as backup.

During evaluation, JEA evaluated based on the aggregate group of bottled gas supply. Bulk gases were evaluated on an itemized basis. When suppliers do not submit pricing for all items a normalization process is used to facilitate aggregate evaluation, high bid prices on a unit price basis are plugged in as place holders for evaluation of price on an aggregate basis. For this evaluation of price, JEA evaluated on in groups based on the scope supply to develop overall best price for JEA.

Comparing pricing on an aggregate forecast adjusted basis, the bid pricing is approximately 1% higher than historical pricing, which based on budget is an estimated \$28,000.00 increase over the life of the contract. JEA did evaluate a single supplier for the full scope of supply, which would have a 12% increase. JEA viewed evaluation and groups, allowing development of supply base and having secondary suppliers to support a value add in this contract in addition to minimizing cost impacts.

The forecast used to bid the services were five (5) year historical volumes (or \$2.1M in spend), provided by the current supplier. JEA solicited the various business units for available budget, which is higher than historical spend. Liquid O2 spend has increased significantly due the ozone plants at Main Street and Greenland water treatment plants coming online, which accounts for the majority of the budget estimate increase.

1410275453 – Request approval to award a contract to Nexair LLC in the amount of \$2,240,000.00, Airgas USA LLC in the amount of \$280,000.00 and Matheson Tri-Gas Inc. in the amount of \$280,000.00 for Industrial and Laboratory Gas Supply in the amount of \$2,800,000.00 subject to the availability of lawfully appropriated funds.

Manager: Myers, Joseph C. – Mgr. Process Chemistry
Sr. Manager Wilds, Brian E. – Sr. Mgr. Energy Production
Director: Stancin, James M. – Dir. Energy Production
Kipp, James R. – Sr. Dir. Generation

VP: Erixton, Ricky – VP Electric Systems

**APPROVALS:** 

05/13/2021

Chairman, Awards Committee

Date

5/13)21

# Appendix B - Bid Forms 1410275453 - Supply of Industrial Gases for JEA

Submit the electronic response

Company N	Name:nexAir LLC			
Company's	Address: 2312 West beaver S	St. Jacksonville Fl. 32209		
License Nu	mber:TIN#	62 136 6439		
Phone Num	nber: _904-753-4825 F	AX No: Email A	ddress: _chuck.duck@n	exair.com
None re	RITY REQUIREMENTS quired d Check or Bond Five Percent (5%)		chase rements Five (5) Years v	//Two (2) – 1Yr Renewals
None re	REQUIREMENTS quired	SECTION 255.05, FLORID	- Project Completion A STATUTES CONTR	
☐ Samples Bid Ope	required prior to Bid Opening may be required subsequent to ning	Bond required 100% of B	id Award	
QUANTIT Quantitie	es indicated are expeting		INSURANCE REC	DUIREMENTS
	the Contract period and are subject requirements.  DISCOUNTS	quantities to be purchased to fluctuation in accordance	Insurance requi	red
2% 10, n Other None Of	fered  ENTER YOUR BID FOR THE	FOLLOWING DESCRIBED ARTICL	LES OR SERVICES:	TOTAL 200
No.	14102/3433 – 21 – Supply o	f Industrial Gases from the Appendix	B Bid Workbook	TOTAL BID PRICE
1	Sul	btotal for Specialty Gases		\$87,103.27
2	S	ubtotal Standard Gases		\$737,318.33
3	Subto	otal for Equipment Rentals		\$234,130.00
	Total Bid Price	e (Total of Lines 1 – 3 above)		\$1,058,551.60_
understand	read and understood the Suns I that in the absence of a redac	RIDDER CERTIFICATION	disclosed to the publ	ic "as-is".
he State of I	g this Bid, the Bidder certifies that ng below is an authorized representa Florida, and that the Company main also certifies that it complies with al	it has read and reviewed all of the ative of the Bidding Company, that	documents pertaining to at the Company is legally	authorized to do business in
We have	received addenda Har	Brun Howell andwritten Signature of Authorized	Officer of Company or	3-23-2021 Agent Date
4	through4			

Appendix B - Bid Forms 1410275453 - Supply of Industrial Gases for JEA VP/Area Sales Manager

#### MINIMUM QUALIFICATIONS

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.

COMPANY NAME:nexAir LLC	-
BUSINESS ADDRESS: 2312 West Beaver St.	
CITY, STATE, ZIP CODE: Jacksonville Fl. 32209	
TELEPHONE: 904-753-4825	-
E-MAIL: chuck.duck@nexair.com	
PRINT NAME OF AUTHORIZED REPRESENTATIVE: Bryan Howard	
SIGNATURE OF AUTHORIZED REPRESENTATIVE: Brun Floring	
NAME AND TITLE OF AUTHORIZED REPRESENTATIVE: Bryon Howard VP/Area Sa	les nager

The Bidder shall have successfully completed two (2) similar service contracts in the United States in the past five (5) years date ending the bid due date.

A similar service contract is defined as the delivery of industrial and/or laboratory gases in the amount of \$200,000.00 for any one (1) year period for each service contract. The service contracts submitted must be from different customers.

BIDDER INFORMATION

# Award #8 Supporting Documents 03/20/2025 Appendix B - Bid Forms 1410275453 - Supply of Industrial Gases for JEA

Company Name: Matheson Tri-Gas, Inc.\_\_\_\_

Submit the electronic response

Company'	s Address: 2438 East Duval St. Lake	e City, FL 320	05		
License N	umber: 74-2460354				
Phone Nur	mber: 386-752-9173F	AX No: 386-7	755-2554 Email Ac	ddress: podonnell@math	iesongas.com
X None r	URITY REQUIREMENTS equired ed Check or Bond Five Percent (5%)		TERM OF CONT One Time Purc Annual Requir	chase	Two (2) – 1Yr Renewals
<ul><li>✓ None r</li><li>✓ Sample</li></ul>	es required prior to Bid Opening es may be required subsequent to	None     Non	N 255.05, FLORIDA	STATUTES CONTR	ACT BOND
QUANTI	LIES			INSURANCE REQ	UIREMENTS
Quanting Throughou with actua PAYMEN	ties indicated are exacting ties indicated reflect the approximate tt the Contract period and are subject l requirements. T DISCOUNTS	quantities to to fluctuation	be purchased in accordance	Insurance requi	red
1% 20, 2% 10, Other None C	net 30	FOLLOWING	DESCRIBED ARTICI	LES OR SERVICES:	
No.	1410275453 – 21 – Supply o				TOTAL BID PRICE
1	Su	btotal for Spe	ecialty Gases		\$_41,897.00_
2	S	ubtotal Stan	dard Gases		\$24,318.88
3	Subt	otal for Equi	pment Rentals		\$_114,993.00
	Total Bid Pric	e (Total of L	ines 1 – 3 above)		\$_181,208.88
The second second second second	e read and understood the Suns nd that in the absence of a reda	cted copy m		e disclosed to the pub	
person sign the State of The Bidde Solicitation	ve received addenda	t it has read ar tative of the B ntains in activ all sections (in	nd reviewed all of the idding Company, the e status an appropria cluding but not limit	e documents pertaining to at the Company is legally the contractor's license for	y authorized to do business in or the work (if applicable). st and Ethics) of this
1	through3				
		Pat O'Donnell Printed Name	, Region General Ma and Title	nager	
A sure base- 5					Constitution (Section

# Award #8 Supporting Documents 03/20/2025 Appendix B - Bid Forms

# 1410275453 - Supply of Industrial Gases for JEA

Submit the electronic response

ompany's	Address: 5249 Tampa West	t Blvd, Tampa Flori	da 33634		
icense Nu	mber:				
hone Num	aber: 813.884.4232	FAX No:	Email A	ddress: seth.stanley@air	gas.com
None re Certifie	RITY REQUIREMENTS quired d Check or Bond Five Perce		Other, Specify	hase	/Two (2) – 1Yr Renewals
None re Samples	quired required prior to Bid Openi may be required subsequen	ing Non Bon	the required d required 100% of B	270-A	ACT DOIND
UANTIT	IES			INSURANCE REQ	DUIREMENTS
hroughout	es indicated are exacting es indicated reflect the appro the Contract period and are requirements.	eximate quantities to subject to fluctuation	o be purchased on in accordance	Insurance requi	red
1% 20, 1 2% 10, 1 Other_ None Of	ffered  ENTER YOUR BID FO		G DESCRIBED ARTICI		TOTAL BID PRICE
1		Subtotal for S	pecialty Gases		\$45,014.88
2		Subtotal Star	ndard Gases		\$_1,068,847.91_
3		Subtotal for Equ	ipment Rentals		\$_127,875.00_
	Total B	id Price (Total of l	Lines 1 – 3 above)		\$_1,241,737.79
y submittings signification of the state of	read and understood the d that in the absence of a ng this Bid, the Bidder certif ng below is an authorized re Florida, and that the Comparalso certifies that it complies	BIDDE Ties that it has read a presentative of the large maintains in acti	TRANSPORT OF THE STATE OF THE S	disclosed to the public documents pertaining to the Company is legally the contractor's license for	this Solicitation, that the authorized to do business in the work (if applicable).
	received addenda	1241	1 maria	Officer of Company or	

J Edwin Robertson, Jr President Airgas USA, LLC - South Region

Appendix B - Bid Forms

#### 1410275453 - Supply of Industrial Gases for JEA

Printed	Name	and I	Citle

#### MINIMUM QUALIFICATIONS

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.

COMPANY NAME: Airgas USA LLC
BUSINESS ADDRESS: 5249 Tampa West Blvd.
CITY, STATE, ZIP CODE: Tampa, Florida 33634
TELEPHONE: 813.884.4232
E-MAIL: Edwin.robertson@airgas.com
PRINT NAME OF AUTHORIZED REPRESENTATIVE:
SIGNATURE OF AUTHORIZED REPRESENTATIVE:
NAME AND TITLE OF AUTHORIZED REPRESENTATIVE:Edwin Robertson, PRESIDENT

The Bidder shall have successfully completed two (2) similar service contracts in the United States in the past five (5) years date ending the bid due date.

 A similar service contract is defined as the delivery of industrial and/or laboratory gases in the amount of \$200,000.00 for any one (1) year period for each service contract. The service contracts submitted must be from different customers.

BIDDER INFORMATION

# 1410275453 Industrial and Laboratory Gas Supply SECTION 1 -- Pure and Specialty Gases

Estimated Usage for Springfield Laboratory and Northside Generating Station Fuels Lab

(Reference: Technical Specifications-Paragraph 6)

Item#	Cylinder Content	DOT Cylinder Spec #; SCF Nominal Cylinder PSI; Cylinder Size (D x H)	Estimated 5-Year Order SCF (A)	Price per SCF (all-inclusive)	Total Cost
1.1	Air Zero Grade < 1.0 ppm THC	3AA2400; 310 ft <sup>3</sup> 2400 psig 9.25" x 55"	620	\$ 0.1226	\$76.01
1.2	Argon Ultra High Purity > 99.999% purity < 0.5 ppm THC	3AA2400; 335 ft <sup>3</sup> 2640 psig 9.25" x 55"	34,505	\$ 0.1473	\$5,082.59
1.3	Helium Ultra High Purity > 99.999% purity < 0.5 ppm THC	3AA2400; 291 ft <sup>3</sup> 2640 psig 9.25" x 55"	76,242	\$ 0.3179	\$24,237.33
1.4	Hydrogen Ultra High Purity > 99.999% purity < 0.5 ppm THC	3AA2400; 261 ft <sup>3</sup> 2400 psig 9.25" x 55"	522	\$ 0.1644	\$85.82
1.5	Hydrogen Zero Grade > 99.995% purity < 0.5 ppm THC	3AA2400; 261 ft <sup>3</sup> 2400 psig 9.25" x 55"	261	\$ 0.06850	\$17.88
1.6	Nitrogen Ultra High Purity > 99.999% purity < 0.5 ppm THC	3AA2400; 304 ft <sup>3</sup> 2640 psig 9.25" x 55"	67,792	\$ 0.1281	\$8,684.16
1.7	Nitrogen Zero Grade > 99.998% purity < 0.5 ppm THC	3AA2400; 304 ft <sup>3</sup> 2640 psig 9.25" x 55"	304	\$ 0.0402	\$12.22
1.8	Oxygen Ultra High Purity > 99.993% purity < 0.5 ppm THC	3AA2400; 337 ft <sup>3</sup> 2640 psig 9.25" x 55"	37,744	\$ 0.0527	\$1,989.11
1.9	Oxygen Zero Grade >99.6% purity < 0.5 ppm THC	3AA2400; 337 ft <sup>3</sup> 2640 psig 9.25" x 55"	337	\$ 0.0267	\$9.00
1.10	Liquid Argon DEWAR Ultra High Purity > 99.999% purity	4L200; 5350 ft <sup>3</sup> DEWAR (230 psig) 20" x 61.5" (180L Micro Bulk)	80,217	\$ 0.0504	\$4,044.54
1.11	Liquid Argon DEWAR Ultra High Purity > 99.999% purity	4L292; 5230 ft <sup>3</sup> DEWAR (350 psig) 20" x 61.375"	5,230	\$ 0.0550	\$287.65

# 1410275453 Industrial and Laboratory Gas Supply SECTION 1 -- Pure and Specialty Gases

Estimated Usage for Springfield Laboratory and Northside Generating Station Fuels Lab

(Reference: Technical Specifications- Paragraph 6)

1.12	Liquid Nitrogen DEWAR Zero Grade > 99.998% purity < 0.5 ppm THC	4L200; 4430 ft <sup>3</sup> DEWAR (230 psig) 20" x 61.5"	4,430	\$ 0.0185	\$81.96
1.13	Liquid Nitrogen DEWAR Zero Grade > 99.998% purity < 0.5 ppm THC	4L292; 5350 ft <sup>3</sup> DEWAR (350 psig) 20" x 61.375"	5,350	\$ 0.0139	\$74.58
1.14	P10 (Methane/Argon) Ultra High Purity Nuclear Counter 10% +/- 1% of > 99.99% purity CH4; with balance of > 99.999% purity Argon	3AA2015; 241 ft <sup>3</sup> 2400 psig 9" x 51"  SPECIAL NOTE: Impurity Limits described in detail in Technical Specification	1,205	\$ 0.27556	\$332.05

Total 5-Year Bid Subtotal for Specialty Gases (enter on Bid Form line 1)

\$45,014.88



# Formal Bid and Award System

Award #7 October 14, 2021

**Type of Award Request:** CONTRACT INCREASE

**Requestor Name:** Myers, Joseph C. - Mgr Process Chemistry

**Requestor Phone:** 904-665-7333

**Project Title:** Industrial and Lab Gas Supply

**Project Number:** Various – See Attached

Project Location: JEA
Funds: O&M

**Budget Estimate:** \$2,773,000.00 (Total Budget for 5 Yrs.)

Scope of Work:

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.

JEA IFB/RFP/State/City/GSA#: 1410275453
Purchasing Agent: Lovgren, Rodney

Is this a Ratification?:

#### **RECOMMENDED AWARDEE(S):**

Name	<b>Contact Name</b>	Email	Address	Phone	Amount
AIRGAS	Seth Stanley	Seth.stanley	Suite 100 259 N.	(813) 883-	
USA LLC		@airgas.com	Radnor-Chester Rd.	4232	\$253,000.00
			Radnor, PA 19087		

**Amount for entire term of Contract/PO:** \$2,773,000.00 **Award Amount for remainder of this FY:** \$515,000.00

**Length of Contract/PO Term:** Five (5) Years w/Two (2) – One (1) Yr. Renewals

**Begin Date (mm/dd/yyyy):** 05/30/2021 **End Date (mm/dd/yyyy):** 05/29/2026

**Renewals:** Yes- Two (2) – One (1) Yr. Renewals

**JSEB Requirement:** N/A - Optional

#### **Background/Recommendations:**

Originally awarded on 05/13/2021 to three (3) companies; Nexair \$2,240,000.00, Airgas \$280,000.00 and Matheson \$280,000.00.

During the RFP process, Matheson submitted a bid with the caveat to review terms and conditions prior to contract execution. Matheson took exception to multiple terms, some of which JEA was amenable to waiving, but the ones that we were not open to were removing background and badging requirements for bottle service delivery drivers. JEA views this as non-negotiable and in the best interest to maintain security compliance and minimize risk to JEA. The other contractors (two previous incumbents) did not take exception to any material requirement.

This request is for a contract increase to the Airgas contract to add the bottle gas services, who is the incumbent and is the next lowest priced bidder for this scope of work. The evaluated price for Matheson was \$181,208.87 vs. \$237,764.16 for Airgas for Bottle Services under this award, which an estimated increase of \$56,555.29 over the five year term. Prices are subject to annual CPI adjustment. It should be

noted the evaluated proposed prices do not match the award amounts because the award is based on the budget, not the proposed price. An overview of the awards and scope of supply is provided below.

Name	Scope of Supply	Original Award Amount	This Amendment	NTE Amount
NEXAIR LLC	Bulk H, N, O2	\$2,240,000.00	\$0.00	\$2,240,000.00
	Bottled Specialty and Industrial gases and bulk CO2	\$280,000.00	\$253,000.00	\$533,000.00

In addition, the business reduced their five year forecast by \$27,000.00, which is reflected in the total award amount, reducing the original award from \$2,800,000.00 to \$2,773,000.00. The reduction in overall contract amount is reflected in the Airgas award amount, so when adding this increase, the full amount awarded to Matheson will not transfer over (only \$253k increase vs. \$280k).

1410275453 – Request approval to award an amendment & contract increase to Airgas USA LLC in the amount of \$253,000.00 for the additional scope for bottle gas services for the Industrial and Laboratory Gas Supply in the aggregate not-to-exceed amount of \$2,773,000.00 subject to the availability of lawfully appropriated funds.

Manager: Sr. Manager	Process Chemistry rr. Energy Production	
Director: Sr. Director:	Stancin, James M. – Dir. Kipp, James R. – Sr. Dir	C.
VP:	Erixton, Ricky – VP Elec	etric Systems
APPROVALS:		
Chairman, Awa	rds Committee	Date
Budget Represe	ntative	 Date

# 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 Ci	ivil Contractors, Inc.		
Company's Address: 8014 Bayberry R	Rd., Jacksonville, FL 32256		
License Number: CGC #057651; CUC	#1226048		
Phone Number: (904) 751-0888 FA	XX No: (904) 751-0988 Email Address: ctot	feri@pettico	patschmitt.com
BID SECURITY REQUIREMENTS  None required Certified Check or Bond (Five Percentage)  SAMPLE REQUIREMENTS  None required Samples required prior to Bid Open Samples may be required subsequentaged Bid Opening	ent (5%)  One Time Purcha Annual Requiren Other, Specify - I  SECTION 255.05, FLORIDA S  None required  Bond required 100% of Bid	se ents Project Com	pletion CONTRACT BOND
QUANTITIES    Quantities indicated are exacting     Quantities indicated reflect the appropriate	oximate quantities to be purchased subject to fluctuation in accordance	-	NCE REQUIREMENTS  Ince 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 t	he Project (transfer total from Bid Wo	rkbook)	\$321,613.00
	Supplemental Work Allowanc	e (SWA)	\$25,000.00
Tota	al Bid Price for the Project Including t	the SWA	\$346,613.00
solicitation. I understand that i public "as-is".	the Sunshine Law/Public Records n the absence of a redacted copy m  BIDDER CERTIFICATION	y proposa	al will be disclosed to the
the person signing below is an authorize business in the State of Florida, and that	fies that it has read and reviewed all of the de ed representative of the Bidding Company, the t the Company maintains in active status an a s that it complies with all sections (including	at the Com	pany is legally authorized to do contractor's license for the work
We have received addenda	Handwritten Signature of Authorized C	Officer of Co	3/14/25 empany or Agent Date
1 through7	Signature of Figure 1		Date 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			Cost (Monument in Removed)
Permits, Bonds, Builders Risk	LS	1	Х	9400	=	s	9,400.00
General Conditions	LS	1	Х	48972	=	s	48,972.00
Mobilization	LS	1	Х	10000	1 =	\$	10,000.00
Survey and As-Builts	LS	1	Х	20000	=	\$	20,000.00
Erosion Control / NPDES	LS	1	X	7200	=	\$	7,200.00
Maintenance of Traffic	LS	I	Х	5900	=	\$	5,900.00
Clear and Grub	AC	0.1	Х	26600	=	\$	2,660.00
Removal of Existing Concrete	SY	360	Х	16	=	\$	5,760.00
Regular Excavation	CY	117	Х	35	=	S	4,095.00
Embankment	CY	34	Х	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	Х	430	=	\$	28,810.00
Concrete Curb, 18" Miami Curb	LF	60	Х	94	=	\$	5,640.00
Fencing, Type B, 6.1-7.0', W/ Barb Wire ATTMT (Removed by JEA)	LF	0	Х	0	=	\$	Yell
Fence Gate, Type B, Sliding/Cantilever, 20.1-24' Opening (Removed by JEA)	EA	0	Х	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	1 =	\$	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	Х	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	=	\$	2
Monument Sign (Removed by JEA)	LS	0	Х	0	=	\$	Dif
Misc, Wire Nuts, wire lub, etc.	LS	1	X	3600	=	\$	3,600.00
Telecomm	LS	1	X	15200	=	\$	15,200.00
Security	LS	1	Х	17200	=	\$	17,200.00
				GRAND TO	TAL	S	321,613.00

#### 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		(Mo	Total Cost onument 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' Openir	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 TO	TAL	\$.	391,000.00	\$321,613.00 T

Transfer the Grand Total for the project to Appendix B - Bid Form

\$321,613.00 Total with workbook lines removed

\$346,613.00 Award Total with workbook lines removed and \$25K SWA added

# 1411509246 Water and Wastewater Utility System Condition Assessments

Vendor Rankings	Deanna Davis	Kent Williamson	Kyle Schoettler	Total	Rank
Arcadis U.S., Inc.	71	81	99.00	250	3
Carollo Engineers, Inc.	93	84	97.25	274	1
Kimley-Horn and Associates, Inc.	83	78	98.38	259	2

Deanna Davis	Professional Staff Experience (35 Points)	Company Experience (20 Points)	Assessment Approach and Work Plan (40 Points)	JSEB (5 Points)	Total	Rank
Arcadis U.S., Inc.	32.5	14	20	4	70.50	3
Carollo Engineers, Inc.	32.75	20	36	4	92.75	1
Kimley-Horn and Associates Inc	30.5	20	28	Λ	82.50	2

Kent Williamson	Professional Staff Experience (35 Points)	Company Experience (20 Points)	Assessment Approach and Work Plan (40 Points)	JSEB (5 Points)	Total	Rank
Arcadis U.S., Inc.	24.75	17	35	4	80.75	2
Carollo Engineers, Inc.	25.5	18	36	4	83.50	1
Kimley Hern and Associates Inc	21.25	10	25	4	70.25	2

Kyle Schoettler	Professional Staff Experience (35 Points)	Company Experience (20 Points)	Assessment Approach and Work Plan (40 Points)	JSEB (5 Points)	Total	Rank
Arcadis U.S., Inc.	35	20	40	4	99.00	1
Carollo Engineers, Inc.	33.75	19.5	40	4	97.25	3
Kimley-Horn and Associates, Inc.	34.38	20	40	4	98.38	2

Overall Averages	Professional Staff Experience (35 Points)	Company Experience (20 Points)	Assessment Approach and Work Plan (40 Points)	JSEB (5 Points)	Total
Arcadis U.S., Inc.	30.75	17.00	31.67	4.00	79.42
Carollo Engineers, Inc.	30.67	19.17	37.33	4.00	87.17
Kimley-Horn and Associates, Inc.	28.71	19.33	34.33	4.00	82.38



200 East Robinson Street, Suite 1400 Orlando, Florida 32801 P 407-478-4642

carollo.com

March 10, 2025

#### JEA

# 1411509246 Water and Wastewater Utility System Condition Assessments Contract

## Fee Schedule

# Carollo Engineers Inc.

	Hourly Rate
Engineers/Scientists	
Assistant Professional	\$ 233.00
Professional	284.00
Project Professional	321.00
Lead Project Professional	361.00
Senior Professional	369.00
Technicians	
Technicians	172.00
Senior Technicians	250.00
Support Staff	
Document Processing / Clerical	157.00
Other Direct Expenses	
Travel and Subsistence	at cost
Mileage at IRS Reimbursement Rate Effective January 1, 2023	\$.70 per mile

This fee schedule is subject to annual revisions due to labor adjustments.

# 1411509646 Electric Utility System Condition Assessment

				ı	· 1	
Vendor Rankings	Deanna Davis	Gabor Acs	Jerry Creel	Total	Rank	
EN Engineering	78	70	67.00	215	1	
Deanna Davis	Professional Staff Experience (35 Points)	Company Experience (20 Points)	Assessment Approach and Work Plan (40 Points)	JSEB (5 Points)	Total	Rank
EN Engineering	27.5	10.5	40	0	78.00	1
Gabor Acs	Professional Staff Experience (35 Points)	Company Experience (20 Points)	Assessment Approach and Work Plan (40 Points)	JSEB (5 Points)	Total	Rank
EN Engineering	28.75	12	29	0	69.75	1
0 - 0		l l	-	-		
Jerry Creel	Professional Staff Experience (35 Points)	Company Experience (20 Points)	Assessment Approach and Work Plan (40 Points)	JSEB (5 Points)	Total	Rank
EN Engineering	27	11	29	0	67.00	1
Overall Averages	Professional Staff Experience (35 Points)	Company Experience (20 Points)	Assessment Approach and Work Plan (40 Points)	JSEB (5 Points)	Total	
				I		



# Schedule of Rates and Services

# **Electric 2024 Rate Schedule**

Effective January 1<sup>st</sup>, 2025 to December 31<sup>st</sup>, 2025

	2025 Proposed			
Position Description	Hou	rly Rate		
JEA Project Manager	\$	209.00		
JEA Senior Consultant	\$	198.00		
JEA Electric System Reviewer	\$	177.00		
JEA Electric System Assessment Team Lead	\$	135.00		



North Loop **Engineering Support Change Order Request** 



February 12, 2025

Mr. Mohsen Shojaeion **Project Engineer** JEA Project Design talem@jea.com

RE: Engineering Services for the 817-858 North Jacksonville Transmission Loop Change Order Request #5 (CO#5) \_REV1

Dear Mohsen:

The Pickett team has been grateful to be a part of the North Loop Project Team. The purpose of this change request is to provide necessary funding to support the ongoing real estate acquisition efforts for the Project. The engineering team will support the JEA Real Estate team with information exchange, providing property specific maps, etc. This effort may or may not capture any re-engineering required based on property owner feedback.

Pickett proposes to perform this work under the terms and conditions of the current contract based on a time and expense, for \$200,000. This funding was estimated at \$25,000 per quarter through October 2026.

If you have any questions or need any additional information, please call me at (904)-382-9514.

Sincerely,

Russell Coby, PE

Manager of Engineering

Russell Coby

(904) 382-9514

rcoby@pickettusa.com

www.pickettusa.com